




Astral Magic in Babylonia

ERICA REINER

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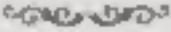
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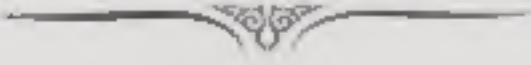
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Astral Magic in Babylonia

ERICA REINER

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Cover: Neo-Babylonian tablet with relief of a swordsk suspended before the sun god.
Courtesy of the British Museum, no. 91002

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Foreword

I, Muhammad ibn Ishāq, have lastly only to add that the books on this subject are too numerous and extensive to be recorded in full, and besides the authors keep on repeating the statements of their predecessors.

al-Madīn, Fihrist, vol. 1, p. 360

Magic, astrology, and witchcraft have become fashionable of late. The appeal of the mysterious and the occult to the contemporary public has spawned a considerable literature on magic, ancient and exotic alike. Classicists have mined Greek and Latin sources for elements of magic and sorcery, and have made forays into the neighboring territories of the ancient Near East for parallels, real or assumed.

Knowledgeable as he may be in his own field, the Classical scholar cannot be expected to be equally well versed in the literature of peoples whose records have survived in the cuneiform script only and are couched in dead languages that have been deciphered only in the last century. One, Sumerian, is not related to any known language; the other, Akkadian, even though it belongs to the Semitic family of languages, diverges from its relatives sufficiently to be difficult to master. Not surprisingly, the most apposite and interesting comparisons often suffer from a misunderstanding of the Near Eastern material. Connections between the oriental cultures and their echoes in the west become tenuous if one term of the equation is incorrectly expressed. To provide a foundation for comparisons the Near Eastern material needs to be presented in a reliable form. This is the purpose of my study. My sources are culled from such scientific texts as medicine, divination, and rituals, which are not usually included in anthologies of Mesopotamian texts and are rarely available in translation.

While I do not claim familiarity with the Classical data, it has seemed necessary that I refer to Greek and Latin sources as I attempt to point up parallels. Many suggestions for the paths to pursue and references to the literature came from David Pin-

gree, whose wisdom and interest have sustained this work. My quotes from and my translations of Classical sources are neither independent nor original; I adduce them simply because they provide a context that the cuneiform sources lack, and therefore they situate in a broader background the Near Eastern texts' terse allusions. The point becomes evident from the examples of "drawing down the moon," and "seizing the mouth," discussed in Chapters V and VI.

In spite of some striking similarities which may simply attest to the universal and ubiquitous nature of magic practices, one must note that well-attested procedures in Hellenistic and later magic are not matched in their more specific details by the Mesopotamian material, as the comparison of rituals for the confection of amulets and prescriptions for molding figurines and their paraphernalia shows. Of course, the few Mesopotamian rituals with detailed descriptions of the materia and the dromena have been many times invoked by comparatists and historians of religion, from Mircea Eliade's *Cosmologie et alchimie babyloniennes* (Bucarest: Vremea, 1937 [in Rumanian]; French translation Paris: Gallimard, 1991) to Walter Burkert's *Die orientalisierende Epoche* of 1982 (*Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse*, 1984:1 = *The Orientalizing Revolution*, Cambridge, Mass. and London: Harvard University Press, 1992), not to mention more romantic and popular books of the past.

There are other important differences between the Near East and Greece. In Mesopotamia, preserved are those rituals that exorcists set down in handbooks and handed on to their disciples and successors through generations; these can be regarded as the official scientific manuals of the experts. Magic was not a marginal and clandestine manipulation; it was an activity prescribed and overtly practiced for the benefit of king and court, or of important individuals – only noxious witchcraft was forbidden and prosecuted. The magic of the common folk probably was never written down, and we have not much to go on when seeking to compare it with the material from the West. Neither can we document from Mesopotamia, as we can from the Hellenistic world and Rome, the changes in the social and legal status of magic and its practitioners. Moreover, in the Classical world we are privileged to have a vivid documentation of

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the use of magic in the literary sources: whether they deal with mythological events or events deemed historical. Classical literature provides the background against which the spells on lamellae, amulets, or gems can be delimited. The accounts of the preparation of a magic ritual, its aims, and its effects found in Homer, Greek drama and novels, in epics such as Lucan's *Pharsalia*, or the stories of Lucian, are the envy of the Assyriologist who has to be content with the allusions, or tantalizing glimpses into the practice of magic, which Mesopotamian sources allow.

The Near Eastern material for this book was collected over many years of association with the *Chicago Assyrian Dictionary*, for the stimulation provided by discussions at the Institute for Advanced Study in Princeton (in the second term of 1990-91 and the summer of 1992), and for the opportunity to explore a variety of avenues there. I am indebted especially to the faculty of the Institute's School of Historical Studies. The original impetus to study astral influences in Babylonia, as well as many suggestions, came from Otto Neugebauer. I could no longer seek his advice for the final manuscript in Princeton, but to his memory I would like to dedicate this work.

ABBREVIATIONS

- [illegible]

ABBREVIATIONS

- [illegible]

ASTRAL MAGIC IN BABYLONIA

- [illegible]

ABBREVIATIONS

- [illegible]



Introduction

The nobles are deep in sleep
the bars (of the doors) are lowered, the bolts(?) are in place -
(also) the (ordinary) people do not utter a sound,
their always open doors are locked.
The gods and goddesses of the country
Šamaš, Sun, Adad and Ištar
have gone home to heaven to sleep,
they will not give decisions or verdicts (tonight).

And the dymer ends:

May the great gods of the night
shining *bi-maš-šar*
below: Iru,
Baw-star, Yoke-star,
Orion, Dragon-star,
Wagon, Goat star,
Bison-star, Serpent-star
stand by and
put a propitious sight
in the lamb I am blessing now
for the haruspicy I will perform at dawn!

One of the rare prayers from Mesopotamia that strike a responsive chord in a modern reader, this prayer, or rather lyric poem, is known among Assyriologists as 'Prayer to the Gods of the Night.' The Gods of the Night of the title is but the translation of the Akkadian phrase *il mashi* that appears in line 14 of this poem and in the incipit of various other versions of the prayer.

The Gods of the Night, as their enumeration in this poem

¹ The first word of the poem here translated *deep in sleep* from *bišlula* 'to become numb' with C. G. B. p. 442 ss. *bišlula* has been read *milšila* by Wolfram von Soden, J. J. 43 (1976) 306 and *bišlu* = *šilā* according *palula*, with the translation 'seated' was proposed by A. Lecomptene, NABU 1999/104.

² The translation is that of Oppenheim, *Ancient Mesopotamia* 12 (1950) 204f. with minor modifications.

shows, are the stars and constellations of the night sky. How prevalent is the appeal to stellar deities, and to what extent and in what circumstances are the gods and goddesses worshipped in Mesopotamia considered under their stellar manifestations, is the subject I wish to treat here.

The situational context for reciting this prayer is divination, and more specifically the preparation by the haruspex - Akkadian *lurū* - of the lamb that will be slaughtered so that the inspection of its entrails - *exta* - yield an omen, usually as answer to the diviner's query. This role of the *lurū* in Mesopotamian divination has not received particular attention in the many studies that deal with it and with its relationship to the Etruscan discipline.

Other areas of Mesopotamian life that rely on, appeal to, or use the power of the stars are magic machinations, meant to cause harm as well as to protect from harm, the collection of amulets and charms, the establishing of favorable or unfavorable moments in time, and the complex domain of medicine, from procuring the herb or other medicinal substance, through the preparation and administration of the medication.

There is a vast corpus of Babylonian literature, hardly exploited by Assyriologists even, and of which a small part only is available to the non-specialist in translation or in excerpt, that can be mined for references or allusions to astral magic, that is, efforts to use the influence of the heavenly bodies upon the sublunar world, for purposes beneficent to man as well as for evil machinations. Such astral magic, as the art of harnessing the power of the stars may be called, was practiced on the one hand by scholars, such as the professional diviners and exorcists, to foretell the future and to avert evil portents, and on the other by sorcerers and sorceresses who harnessed the same

See especially Jean Vongayrol, 'Textes de divination sur la divination babylonienne' (1975, 1985), in *La Divination en Mésopotamie antique et dans les régions voisines* (M), *Recontres Assyriologiques Internationales* (Paris: Presses Universitaires de France, 1986) 5-19, idem, 'La divination babylonienne' in *La Divination* (A. Caquot and M. Leboucq, eds. (Paris: Presses Universitaires de France, 1986) vol. 1, pp. 25-81; see also Jean Bottani, *Symptômes, Signes, Lectures*, in *Divination et Rationalité* (J.-P. Vernant, ed. (Paris: Éditions du Seuil, 1974) 700-706.

powers to inflict harm upon an adversary. The former were knowledgeable in apotropaic rituals, the latter in black magic.

Of the stars that appear in these magic contexts it is not only the planets that are invoked for their influence, as they are in Hellenistic astrology, but also various fixed stars and constellations. Babylonian constellations take their names from the shapes that their configurations suggest: human figures, animals, or common objects, similar, and sometimes identical to the names they had in Classical antiquity, as we learn from the descriptions of celestial configurations known as the Greek and the Barbaric, i.e. non-Greek, 'spheres'; the latter usually taken to refer to the Egyptian or the Babylonian sphere.

Illustrations are rare and late in Mesopotamia, still, we are able to identify many constellations, even those whose names are uniquely Babylonian. The identifications are based mainly on astronomical data; these are complemented and confirmed by the single cuneiform text that gives a description of part of the heavens. Thus, among the animal figures, the Goat is the constellation Lira, and the Snake, more or less, corresponds to Hydra; among the demons and divine beings the Demon with the Gaping Mouth is roughly equivalent to Cygnus (with part of Cepheus), and the True Shepherd or the god of the sky, Anu, is Orion, or the celestial counterparts of terrestrial objects: the Arrow is Sirius, the Furrow, Spica, and the Wagon is Ursa Major, our Big Dipper.

Mathematical astronomy in Mesopotamia appears in the fifth century B.C. The observation of the heavens and the recognition of the periodicities of heavenly phenomena go back, nevertheless, much farther in time. The identity of the appearances of Venus as Evening star and Morning star was known early; and so was, though possibly at a later date, that of the two appearances of Mercury. The telling names given to the fastest planet, Mercury, the Leaping One, and to the slowest, Saturn, the Steady One, also testify to the astronomical know-

¹ Also called *Sphaera graecorum* and *spheeris barbarorum*; see Ball, *Sphaera* pp. 411f.

² E. F. Weidner, 'Eine Beschreibung des Sternenhimmels aus Assur', *AOA* 4 (1927) 73-87.

³ C. LECLERCQ, 'Sphère', *ser. V. I. Sages*, 1931, p. cxxvii.
S.W. LEE, *Kanabano*.



FIGURE 1. Nebet-um Assurnasirpal's palace with the king wearing a necklace hung with emblems of the planets. Courtesy of the British Museum, no. 124525.

edge of the Babylonians. Of the other planets Mars was, obviously, the Red planet, also known as the Enemy; Jupiter was Heneh; Sun and Moon were included in the number of the seven planets. The Sun, surveying the entire earth, omnipresent and omniscient, was as in other cultures the god of justice, as expressed in the great hymn to Šamaš, discussed below, and the Scales (the constellation Libra, Akkadian *Libra*) have as epithet 'Šamaš's star of justice,' an association comparable to that of personified Justice holding the scales in her hand on medieval representations.¹

The stars and planets may be addressed under their astral

¹ Akkadian *Libra* and *Virgo* (enemy).

² Sumerian *Libra* (AR) Akkadian *Libra*, the meaning of Jupiter's most common name, *ŠAR*, *ŠAR*, *ŠAR*, has so far remained opaque; not even the correct reading of the sign *ŠAR* (that is, whether they are to be pronounced *šar* or *šar*) is known.

³ It was the constellation Virgo, which is adjacent to Libra, that was associated with Uke, the goddess of justice, see *RI* 541913:577ff., as by the Ummayyids to Aras (cf. *RI* 541913:577ff.). (Mars) *Virgo* (the goddess of justice) for the scales as attribute of the goddess Justice, see e.g. *Jahrbuch der Deutschen Palästina-Forschung*, Engelbert Kutschbaum, S. 1, 1934, vol. 2 (Horn, Flöcker, 1936) 467, see especially Karl Ludwig Skutsch, 'Librae Aequum' *Die Antike* 12 (1936) 49-54.

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FIGURE 2. Cylinder seal showing bearded Istar. Courtesy of the British Museum, no. 113881.

names or as the deities they represent. Nimmur, Istar, Gula, etc., the difference between the two designations may be expressed in the cuneiform writing by the sign that precedes their names: either the sign for 'god' or the sign for 'star'. The prefixed cuneiform sign indicates, as do other so-called 'determinatives,' the class to which an entity belongs. The determinative for divine names, customarily transcribed as a raised letter *d* (¹), is abbreviated from the Sumerian word *dugur* 'god'; itself evolved from the pictogram representing an eight-pointed star, the determinative for stars is the word-sign for the Sumerian word *and* 'star' whose pictographic predecessor was a configuration of three stars. Thus, the spellings MU *d* PA-BI SA-*d* and PA-BI SA-*d* 'Sagittarius,' MU *d* SIPA ZI AN NA and SIPA ZI AN NA 'Orion,' MU *d* GI *d* UD and GI *d* UD 'Mercury,' MU *d* Delebat and Delebat 'Venus' are interchangeable, sometimes even in one and the same text.

The highest divine triad, Anu, Enlil, and Ea, are not identified with individual stars, constellations, or planets; rather, among them they represent the entire sky, not only in the person of Anu, the sky god par excellence, whose name in

¹ Uramastological and astronomical texts occasionally use other determinatives—such as the sign *ni*—for *and* or *na*, for which the readings *mul*, *mul*, and *mul*, were derived by Assyriologists; the reasons for the choice of those determinatives elude us; they may represent a rounded form of a pictogram. For *mul* see the literature quoted in A. L. Sachs, *JCS* 21 (1967) published (1969) 200.

Sumerian, *an*, means "sky,"¹² but especially as lords of the three "paths" in the sky: the "Path of Anu," the "Path of Enlil," and the "Path of Ea," which represent three segments of the horizon over which the stars rise.¹³

The two appearances of Venus, even though identified as the same planet, were attributed to two distinct manifestations of the same deity. As morning star, Venus was female, as evening star, male,¹ and the two aspects corresponded to the double character of Istar as goddess of love and war. As the male deity Istar is described as bearded,² and she is so represented on an Islamic bronze candelabra now in the Musée des Arts Décoratifs.³ As for Mercury who, just as in Hellenistic astrology, is both male and female,⁴ the identity of the planet in his evening and morning visibilities was recognized long before astronomical tables calculating Mercury's period were composed. Mercury is addressed as "star of sunrise and sunset."⁵

Mars, the hostile planet presides over destruction, and is

The polytogram which evolved into the coniform stage A_2^* , which also stands out among the rest, is the unique left-right bounded star.

For this investigation, we found Polymer 8FC-2 (p. 17) the three paths frequently occur in a fixed order.

3. A Babylonian astronomical compendium, published in connection with Prohm's assignment of *signatures* to planets in 1908 (pp. 16 and 17). The Babylonian evidence is *Babylonian astronomical text dealing with Venus*, published in 1933 (JGK 5086), unpublished in 1961 (see 8100) and in the lines: Venus is female at sunset and Venus is male at sunrise, was communicated by Sauer in 1984 (J 1982a). This has been accepted by Pigeot (1982, p. 17) and in 1987. In fact, JGK 5086 is the only source holding that Venus is female at sunset, while others (JGK 134843, K. Julius 8124, 249, etc.) see Kerner and Pigeot. BFG 32 hold that Venus is male at both sunset and sunrise, female rising in the east but Venus being female in the east, see also Wolfgang Henkel. Thus sun at night and the Disc of Heaven in Babylonian texts (JGK 10860, 127, 51

*It should also be noted that the series $\{a_n\}$ of q for which see Chapter V, also can be represented with a bevel on Mesopotamian cylinder seals, see fig. 2.

listed as *Nes. 361* in the *Conchologie Katalog* of the 1910 München exhibition by F. Siedl (Hessisches 1912: 174 p. 4). A very small number of standard-bearing.

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¹ 1681-82, 1683-84, 1684-85, 1685-86, 1686-87, 1687-88, 1688-89, 1689-90, 1690-91, 1691-92, 1692-93, 1693-94, 1694-95, 1695-96, 1696-97, 1697-98, 1698-99, 1699-1700, 1700-1701, 1701-1702, 1702-1703, 1703-1704, 1704-1705, 1705-1706, 1706-1707, 1707-1708, 1708-1709, 1709-1710, 1710-1711, 1711-1712, 1712-1713, 1713-1714, 1714-1715, 1715-1716, 1716-1717, 1717-1718, 1718-1719, 1719-1720, 1720-1721, 1721-1722, 1722-1723, 1723-1724, 1724-1725, 1725-1726, 1726-1727, 1727-1728, 1728-1729, 1729-1730, 1730-1731, 1731-1732, 1732-1733, 1733-1734, 1734-1735, 1735-1736, 1736-1737, 1737-1738, 1738-1739, 1739-1740, 1740-1741, 1741-1742, 1742-1743, 1743-1744, 1744-1745, 1745-1746, 1746-1747, 1747-1748, 1748-1749, 1749-1750, 1750-1751, 1751-1752, 1752-1753, 1753-1754, 1754-1755, 1755-1756, 1756-1757, 1757-1758, 1758-1759, 1759-1760, 1760-1761, 1761-1762, 1762-1763, 1763-1764, 1764-1765, 1765-1766, 1766-1767, 1767-1768, 1768-1769, 1769-1770, 1770-1771, 1771-1772, 1772-1773, 1773-1774, 1774-1775, 1775-1776, 1776-1777, 1777-1778, 1778-1779, 1779-1780, 1780-1781, 1781-1782, 1782-1783, 1783-1784, 1784-1785, 1785-1786, 1786-1787, 1787-1788, 1788-1789, 1789-1790, 1790-1791, 1791-1792, 1792-1793, 1793-1794, 1794-1795, 1795-1796, 1796-1797, 1797-1798, 1798-1799, 1799-1800, 1800-1801, 1801-1802, 1802-1803, 1803-1804, 1804-1805, 1805-1806, 1806-1807, 1807-1808, 1808-1809, 1809-1810, 1810-1811, 1811-1812, 1812-1813, 1813-1814, 1814-1815, 1815-1816, 1816-1817, 1817-1818, 1818-1819, 1819-1820, 1820-1821, 1821-1822, 1822-1823, 1823-1824, 1824-1825, 1825-1826, 1826-1827, 1827-1828, 1828-1829, 1829-1830, 1830-1831, 1831-1832, 1832-1833, 1833-1834, 1834-1835, 1835-1836, 1836-1837, 1837-1838, 1838-1839, 1839-1840, 1840-1841, 1841-1842, 1842-1843, 1843-1844, 1844-1845, 1845-1846, 1846-1847, 1847-1848, 1848-1849, 1849-1850, 1850-1851, 1851-1852, 1852-1853, 1853-1854, 1854-1855, 1855-1856, 1856-1857, 1857-1858, 1858-1859, 1859-1860, 1860-1861, 1861-1862, 1862-1863, 1863-1864, 1864-1865, 1865-1866, 1866-1867, 1867-1868, 1868-1869, 1869-1870, 1870-1871, 1871-1872, 1872-1873, 1873-1874, 1874-1875, 1875-1876, 1876-1877, 1877-1878, 1878-1879, 1879-1880, 1880-1881, 1881-1882, 1882-1883, 1883-1884, 1884-1885, 1885-1886, 1886-1887, 1887-1888, 1888-1889, 1889-1890, 1890-1891, 1891-1892, 1892-1893, 1893-1894, 1894-1895, 1895-1896, 1896-1897, 1897-1898, 1898-1899, 1899-1900, 1900-1901, 1901-1902, 1902-1903, 1903-1904, 1904-1905, 1905-1906, 1906-1907, 1907-1908, 1908-1909, 1909-1910, 1910-1911, 1911-1912, 1912-1913, 1913-1914, 1914-1915, 1915-1916, 1916-1917, 1917-1918, 1918-1919, 1919-1920, 1920-1921, 1921-1922, 1922-1923, 1923-1924, 1924-1925, 1925-1926, 1926-1927, 1927-1928, 1928-1929, 1929-1930, 1930-1931, 1931-1932, 1932-1933, 1933-1934, 1934-1935, 1935-1936, 1936-1937, 1937-1938, 1938-1939, 1939-1940, 1940-1941, 1941-1942, 1942-1943, 1943-1944, 1944-1945, 1945-1946, 1946-1947, 1947-1948, 1948-1949, 1949-1950, 1950-1951, 1951-1952, 1952-1953, 1953-1954, 1954-1955, 1955-1956, 1956-1957, 1957-1958, 1958-1959, 1959-1960, 1960-1961, 1961-1962, 1962-1963, 1963-1964, 1964-1965, 1965-1966, 1966-1967, 1967-1968, 1968-1969, 1969-1970, 1970-1971, 1971-1972, 1972-1973, 1973-1974, 1974-1975, 1975-1976, 1976-1977, 1977-1978, 1978-1979, 1979-1980, 1980-1981, 1981-1982, 1982-1983, 1983-1984, 1984-1985, 1985-1986, 1986-1987, 1987-1988, 1988-1989, 1989-1990, 1990-1991, 1991-1992, 1992-1993, 1993-1994, 1994-1995, 1995-1996, 1996-1997, 1997-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024, 2024-2025, 2025-2026, 2026-2027, 2027-2028, 2028-2029, 2029-2030, 2030-2031, 2031-2032, 2032-2033, 2033-2034, 2034-2035, 2035-2036, 2036-2037, 2037-2038, 2038-2039, 2039-2040, 2040-2041, 2041-2042, 2042-2043, 2043-2044, 2044-2045, 2045-2046, 2046-2047, 2047-2048, 2048-2049, 2049-2050, 2050-2051, 2051-2052, 2052-2053, 2053-2054, 2054-2055, 2055-2056, 2056-20

INTRODUCTION

equated with Nergal, god of pestilence. His rising – first visibility – is a bad omen, portending death of the herds: "Mars will rise and destroy the herd,"¹⁹ the only prediction of an astronomical event, apart from omens predicting an eclipse, appearing in other than celestial omens. His Akkadian name, *Salbatanu*, has no known meaning or etymology.²⁰ Learned Babylonian commentaries have explained this name as 'He who keeps plague constant' by breaking up the name into its syllabic components and interpreting these syllables in Sumerian – thus arriving at the assumed Akkadian reading *Muštaharri mušnu*.²¹

The names of most planets have no identifiable meaning in either Sumerian or Akkadian; neither the just mentioned name of Mars, *Salbatanu*, nor Jupiter's most common name *ŠAL ME GAB* (see note 9), nor the name of Venus, written *Dil-bat* (preferably to be read *Dēle-bat* following the Greek transcription *Delephat*). No clear etymology or explanation exists for the Akkadian or Sumerian word for 'planet' itself. In Greek, *planētes* are the 'errant ones' because they roam the sky amidst the fixed stars; the Akkadian word for planet, *labbu*, 'wild sheep,' may also refer to their irregular movement.²²

¹⁹ References to this prediction from lower omens have been collected by Francesca Rochberg-Halton, in J. N. E. Spence, *Proceedings of the Society of Biblical Studies* (Philadelphia: The University Museum, 1998), 123–28. The omen also appears as a quodous of a liver omen, RA 65 (1971) 82, cited, 110 Sept. 2000, is also noted by M. Stol, *Bibliotheca Orientalis* 47 (1990) 775, and as a celestial omen of solar eclipses, with the name of Mars replaced by *ŠAL ME GAB*, planet, 46 C. Samay 80–2.

²⁰ Even the correct reading of the polyvalent signs *sal* and *bat* – *bat* with which the name is uniformly written has only recently been confirmed with the help of a spelling *sal ba ta nu* in the liver omen cited in the preceding note; see Jan Nougayrol, RA 65 (1971) 82, and line 82.

²¹ In the tot *šR* 60 ms. Y 42. Based on the equations *šR* *salbatanu* (imperfect) to last long, participle *salbatana* (PAP) + *mušnu* with phonetic complement *nu* = mutation plague or great death.

²² The Sumerian word which is equated with *labbu* (734, 703), also contains the word 'sheep' (190), but the second element, the polyvalent sign *lab*, once thought to have the reading *lab* 'wild', has recently been found glossed *ni*, in the gloss to line 34 of Tablet M of 14 M 6-ra, *mušbatu*, which lists hides, among them, *šR* 1, 192, *šR* 192 gloss, *ni du ni di* = *mušbatu* (hides), see MSL 7 124–74, and for the gloss, MSL 9 197. Since in Sumerian *ni* means 'finished' or 'complete', the once assumed meaning 'wild sheep' for the Sumerian word is no longer tenable.

But of all the planets it was the Moon that was of the greatest importance to the Babylonians. It was the Moon, from its first sighting to its last, that regulated the calendar, which was based on lunar months. The Moon is a "Fruit, lord of the month,"²¹ constantly renewing himself, as his epithet *adēšū* 'ever-renewing' stresses. The Moon's waxing and waning does not determine a stronger or weaker influence on, say, the growing of crops as it does in Hellenistic astrology, but its phases signal the timing of various ritual acts. The Moon god, *sin*, the father of both Šamaš (the Sun) and Ištar, is a male deity, not the Selene or Luna of the Greeks and Romans, but he still has an affinity with women magicians, sorceresses who are able to "draw down the Moon" (see Chapter VII). The eclipse of the Moon, in particular, remained a terrifying event, whose dire predictions had to be averted by penitential rites,²² including, under the Sargonic kings in the eighth and seventh centuries B.C., the installation of a substitute king. This substitute king reigned for one hundred days and was then put to death, thus taking upon himself the misfortune and death portended for the king.

Sun, Moon, and Venus, represented by their emblems the sundisk, the lunar crescent, and the eight-pointed star, are commonly depicted on monuments—stelae, boundary stones—as guardians of the provisions sworn to in the treaty or deed recorded therein.

The influence of these stellar deities on man is twofold: they are both the origin of ills that beset him and the beneficent powers that can be made favorably disposed toward a suppliant. They may cause affliction, exerting nefarious influence on their own or through *sumpates*' manipulations, and they may herald ill fortune by their motions and configurations that are recorded in the extensive collection of celestial omens.

However, through proper prayers and rituals the stars' influence can avert the portended misfortune and assist the exorcist and the physician in healing illness.

²¹ *UŠ-ŠIN*, the Sumerian name is also the name of a Babylonian royal hemlock, see *UŠ-ŠIN*, pp. 117-118.

²² *UŠ-ŠIN*, pp. 117-118. See also: Erich Hehnig, *Ägypten und Babylon nach den Quellen dargestellt* (Berlin and Leipzig: de Gruyter & Co., 1931) no. 24, pp. 96-98.

For this ritual see *Enoplos*, 1, 15-2, pp. xxii-xxvii.

INTRODUCTION

Astral magic and the role of astral deities have been amply studied in connection with Hellenistic Egypt and the corpus of Hermetic texts and magical papyri originating in Egypt.¹ The cuneiform evidence from Mesopotamia has been largely neglected by Assyriologists, and has been at the most utilized at second hand by other scholars who had to rely on often inaccurately edited Babylonian sources. But even if comparison with neighboring civilizations had not so suggested, the power attributed to the heavenly bodies and their significance and impact according to the Babylonians' conception in their cosmology should have been evident from such Mesopotamian images as the poetic phrase "writing of heaven" (*šitir-kam* or *šitir-lurame*) applied to the starry sky;² and from King Esarhaddon's remark that he depicted on steles "lamku-stars which represent the writing of my name."³ Uncertain is the reference, unfortunately still opaque, to the "reading" or "meaning" of Assurbanipal's name that was revealed in a dream to Gyges, king of Lydia.⁴

Poetic texts are also the first to adumbrate how the moon and the stars give signs and warnings to men, even before the art of celestial divination had assumed the status of a scholarly discipline. The so-called "King of Battle" (*šar-šamharu*), an Old Babylonian poem dealing with the exploits of King Sargon of Akkad

¹ Cf. G. J. Toynbee, *The Egyptian Hermes: a historical approach to the late pagan mind* (Cambridge: Cambridge University Press, 1909) can be consulted for earlier references.

² See e.g. *MDP* 2.3, p. 140, xv, cited (after Zimmer) already by Franz Delius in *Die Vphalerie Mesopotamiens* (Stuttgart: Hettl, Leipzig and Berlin: Teubner, 1922), 309.

³ *šitir-kam lamku*: Berger, *Esarh.*, p. 28-11; *šitir-kam lu lamku*: Berger, *Esarh.*, p. 77-1 p. 40-9. An attempt at correlating this phrase with the symbols depicted on the stone monument was made by H. D. Luckenbill, "The Black Stone of Esarhaddon," *American Journal of Semitic Languages* 41 (1924-25) 165-73; see also, with reference to Sargon's use of the phrase, C. J. Gadd, *Blasphemy and Rule in the Ancient East* (The Schweich Lectures of the British Academy, 1915) London, 1920, 93-95.

⁴ See for this episode Mordechai Cogan and Hayim Tadmor, "Gyges and Ashurbanipal," *ibid.* 85.46 (1977) 75; though they, by preferring the manuscript tradition which writes *ut šitir kam* "the mention of my kingship" over *ut lamku* "the 'reading' of my name," divorce this occurrence from the other occurrences of this well-attested phrase.

ASTRAL MAGIC IN BABYLONIA

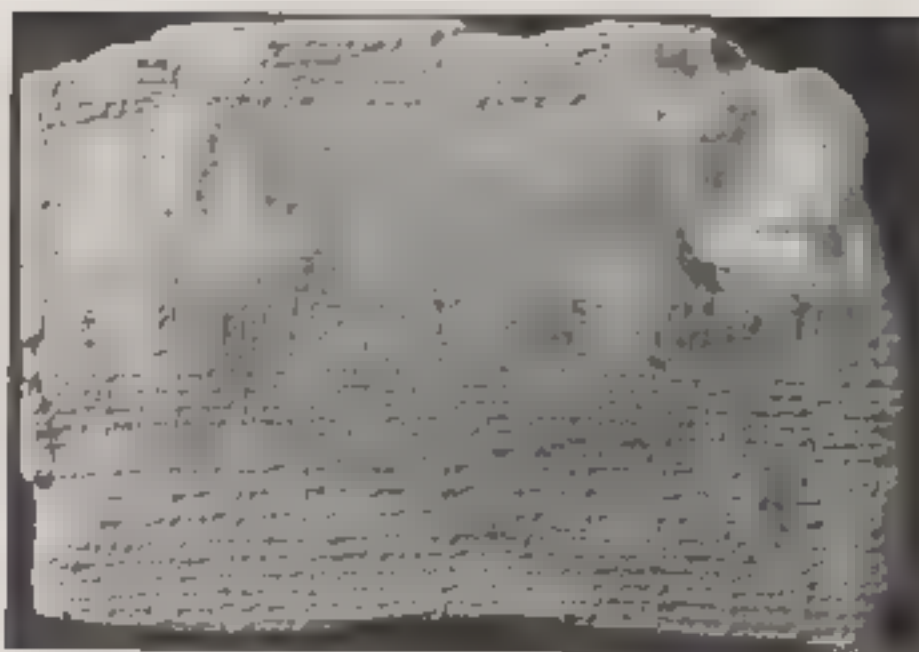


FIGURE 3

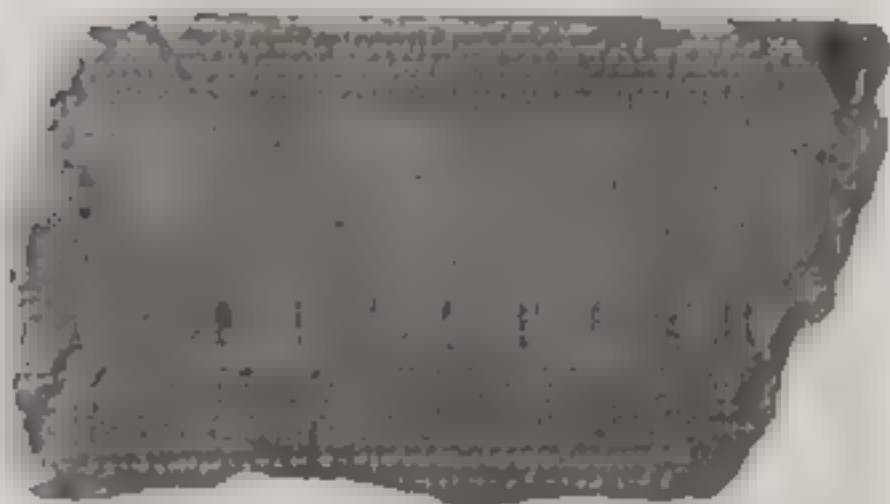


FIGURE 4

INTRODUCTION

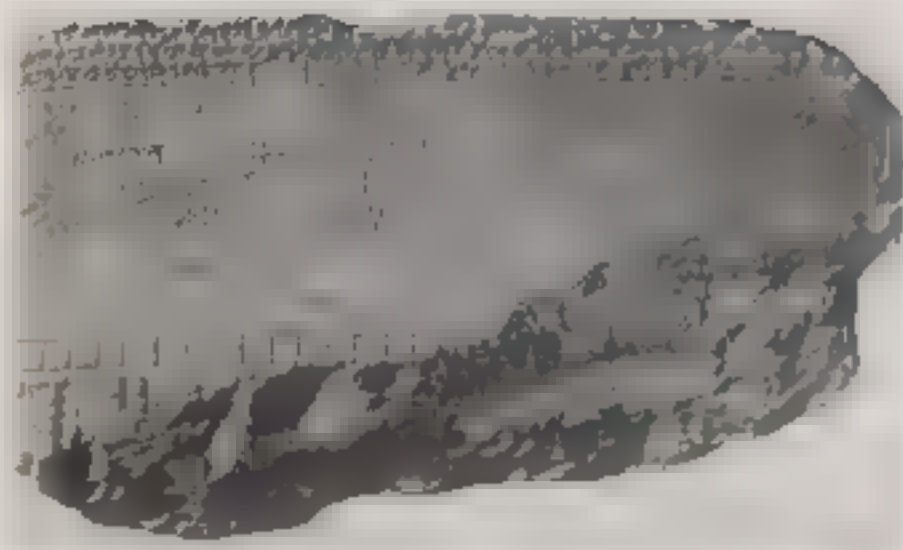


FIGURE 5

FIGURES 3, 4, 5. Representations of constellations incised on a Late Babylonian tablet. Fig. 3 courtesy of the Louvre, no. AO 6440; fig. 4 courtesy of Staatliche Museen zu Berlin, no. VAN 784; fig. 5 courtesy of Staatliche Museen zu Berlin, no. VAN 786.

(c. 2400 B.C.),¹⁰ relates how 'the sun became obscured, the stars came forth for the enemy,'¹¹ a celestial portent that must refer to a solar eclipse during which the stars became visible, an event that was evidently to be interpreted as the stars portending victory for Sargon against his enemy.

Allusions to celestial portents given to Sargon appear in liver omens, the earliest recorded mode of divination, which is attested long before celestial omens were collected and codified. A particular configuration of the sheep's liver is said to refer to King Sargon of Akkad as one who 'traversed darkness and light came out for him.'¹² This description must record an eclipse occurring under Sargon, in spite of its peculiar phraseology; indeed, omens from lunar eclipses were the first to be committed to writing, possibly as early as 1800 B.C.¹³ More

¹⁰ Joan C. Westenholz, *Legends of the Kings of Akkad* (forthcoming).

¹¹ *idim šamšum kakkabu u-su-ir anamkum* K. 3.45 (1953) 173-67, 64. For a different interpretation see J. H. Hoffmann, *KIA* 56 (1965) 123.

¹² For omens referring to Sargon of Akkad see J. H. Hoffmann, *JAOS* 83 (1963) 74.

¹³ E. Rochberg-Halton, *Aspects of Babylonian Celestial Divination: The Lunar*

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in the signs of the zodiac and on their mutual configurations. In this latest and most significant modification astrology became known to the Greeks in the Hellenistic period. But with the exception of some typical Mesopotamian relics the doctrine was changed in Greek hands to a universal system in which form alone it could spread all over the world. Hence astrology in the modern sense of the term, with its vastly expanded set of "methods" is a truly Greek creation, in many respects parallel to the development of Christian theology a few centuries later.

Yet besides Greek deterministic astrology, that is, genethliology, or horoscopic astrology, to which the quoted strictures of Neugebauer apply, and Mesopotamian omen-literature with which he contrasted it, there exist areas in which the Babylonians acknowledged the influence of the stars. These are, firstly, catarchic astrology, which endeavors to find the most auspicious moment for commencing an undertaking; secondly, belief in the stars' power to imbue ordinary substances with supernatural, magic effectiveness, which I discuss in Chapters II and III; and thirdly, the apotropaic and prophylactic application of astral influence, both benefic and malefic, especially in the machinations of black magic, insofar as stars can protect from and avert the evil wrought by sorcerers or portended by an ominous sign. Cuneiform sources reveal how the Babylonians conceived the celestial bodies, what power they attributed to them, what they expected to obtain through these powers, and what were the means they used to gain their influence. Documentation for these concerns is found not so much in the literature that concerns itself with celestial omens but in the scientific writings of the Mesopotamian intellectuals. These writings include, in addition to fields that are generally acknowledged as science today, such as medicine, others that are not, such as divination and various activities around it. Much new material can be found in the recently reexamined correspondence of Assyrian and Babylonian scholars in the letters they addressed to the kings of Assyria in the eighth and seventh centuries,¹ and in their reports on astronomical observations which include pre-

¹ Cf. Neugebauer, *PLM* 16815.

² Published by Simo Parpola, 1982, revised and expanded in his *Letters from Assyrian and Babylonian Scholars* (SAA 10) (1987).

dictions based on the phenomena observed as well as the means to avert portended evil.¹ We may follow them in making no distinction between scientific astronomy and magic operations.

Parallels with beliefs and practices of the Hellenistic world, as I try to show in these pages, strengthen my claim of the uses made of the astral powers. Mesopotamian sources not customarily adduced for the history of culture may thereby add their evidence to the history of magic, especially astral magic.

¹ Published by Hermann Hunger, *Astrological Reports to Assyrian Kings*, SAA 8 (1992).

CHAPTER I

The Role of Stars

Stars function in a dual role in relation to man: they exert a direct influence and serve as mediators between man and god. Directly, through astral irradiation, they transform ordinary substances into potent ones that will be effective in magic, medicine, or ritual, as *materna medica*, amulets, or cultic appurtenances. Stars also provide reliable answers to the query of the diviner. More important, in their second role stars are man's medium of communication with the divine.

The role of the stars as mediators emerges from the descriptions given in Mesopotamian poetry. For poetry can be found not only in the much-anthologized pieces from Gilgamesh and other myths or epic tales, or in the hymns and prayers of the official cult that have from early on attracted attention and comparison with the psalms of the Old Testament. It is often hidden in the scientific texts, those that constitute the corpus of the professional exorcist and diviner, disdained by the scientist and dismissed as boring by the literary historian.

The mediating role of the stars – not unlike the role of saints – is most clearly stated in the prayer of the suppliant to the Yoke star, approximately our Boötes, in an apotropaic ritual against mistakes occurring while executing temple offices.

Yoke star standing at the right, Yoke star standing at the left,
the god sends you to man, and man to the god,
(and now) I send you to (my personal) god who eats my food offering
drinks my water (libation),
accepts my incense offering.¹

* SIL 1: 51 DUN 5 ZI DA CA BBA NUL 51 DUN 5 CA BBA 5 UB BA
isapparkunūš du ana amēli amēli ana li
anaku išpurkunūš ana DUN 56 akal 51 NIN 5A 5B 5A 5C 5A 5C
mahiru sirqia

KAB 38 r. 24ff. and duplicates: see Caplice, *Op. Scs.* 39 (1971) 124n.

known whether they were addressed as deities or planets, while surviving prayers to Mars¹¹ show that he was addressed both under his planetary name *Salbatanu* and as the deity, *Nergal*, whose astral manifestation Mars is. Ambiguity obtains of course in prayers addressed to the Moon, whose name *Sin* applies equally to the Moon god and to the Moon as one of the seven planets. Lifting-of-the-hand prayers are also addressed, collectively, simply to "stars," or "all stars"¹² often called "gods of the night."

Unequivocally astral names are used in the treaties that Esarhaddon concluded with the vassals of Assyria to secure the rights of succession of his son Assurbanipal; they were put under the protection of not only the major gods *Samaš*, *Sin*, and *Istar*, who are elsewhere too identified with Sun, Moon, and the planet Venus, but also of other astral deities. Thus Jupiter introduces the list of six astral deities in Esarhaddon's Succession Treaty, the other five being Venus, Saturn, Mercury, Mars, and Sirius, in this order.¹³ Similarly, Jupiter precedes Sirius¹⁴ in another treaty¹⁵ which is known only from its mention in a letter of Esarhaddon's son *Samaš-šumu-ukin*.¹⁶ The treaties concluded in Anatolia between the kings of the Hittites and their neighbors some six hundred years earlier were also put

¹¹ Among them the prayer to *Salbatanu* (Mars) listed as *Nergal* 1 in Werner Mayer, *Urkunden Assurs* (note 4b above) 407; for prayers to *Sin*, *Venus*, the *Planetes*, and *Dumuzi* see Parpola, *JAS* 2 p. 349 n. 633.

¹² *Urkunden Assurs* 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

¹³ See Werner Mayer, *Urkunden Assurs* (note 4b above) 427a; the prayer is also cited 407, 471, 478, 480, 481.

¹⁴ *Urkunden Assurs* 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

¹⁵ *Urkunden Assurs* 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

¹⁶ See Parpola, *JAS* 24 (1972) 32 n. 57.

¹⁷ Edited by S. Parpola, "A Letter from *Samaš-šumu-ukin* to Esarhaddon," *JAS* 34 (1972) 21-34.

THE ROLE OF STARS

under the protection of the planets and stars, particularly of Venus, called "resplendent [štar variant: Venus]"¹⁰ as well as of the storm god and such cosmic powers as mountains and rivers, and of the "gods of the nether world" for which a variant substitutes Ereshkigal, the queen of the nether world.¹¹ The appeal to Babylonian deities in their astral manifestation can still be found in Syriac magic texts.¹²

Invocations to stars are not necessarily long and elaborate. A few lines, often a few words suffice to state the petitioner's appeal. In extreme cases, divine favor is requested by a simple enumeration of star names beside names of gods, natural forces, and other entities such as the days of the month, in a litany-like sequence, as in the type of text composed to gain absolution that I have called *lpsio* litanies from their beginning *lpsio* 'may absolve' for example. In one such litany⁴ an enumeration of various gods is followed by 'Gods of the night, Pleiades, Virgo, Orion, Jupiter,' and the names of the rivers Tigris, Euphrates, and other rivers."

Of all the stars, it is *birrus* that is especially often addressed, both under its stellar name 'Arrows,'⁷² and as the star's divine manifestation, the god *Ninurta*. The hymnic invocation 'Arrow-star by name, making battle resound', . . . paths, making

¹⁰ 'Kāra variant: Māh. *Ṣaṣṭhi mātā rāhu* also 'Aśva-kāra variant 'Aśva-Māh. Treaty between Suppabhimma and Sattavajza. KMs 1.1 variants from KMs 1.2 see K. E. Wernner, *Paläsiro-Paläsiro: ein keltischer Hochzoo-Studien* (Schöpfung, 1972), pp. 1, 45 and 50, and 'Aśva-Māh. Treaty between Sattavajza and Suppabhimma, see Wernner, *ibid.* 54, 42).

11. T. p. *Alkrischott* Rs 1st 138v, lines 105–30; a text edited by Guy Bédier, *Chants de jongleurs* (1924), no. 12^o, for lines 105–110 see ibid. 146–47 for *Freiskal* occurrences in French magic texts see Harry Dieter Metz, 'Fragment from a Carabosse Ritual', *History of Religions* 3 (1972), 261–267, 265. A Habsburgian ritual against snakes (no. 85, fol. 190v) 132, no. 86 also prescribes a prayer to be recited before *Freiskal*, the conviction of the chthonic goddess with snakes is obvious.

¹ See Philippe Gagnoux, *Présentation: énergies sonores et ouvriers* [Introduction: Sound Energies and Workers] (Paris: L'Harmattan, 2002).

Reuter, T. 1999. *Estuaries*. NIS 15 (May): 22-23.¹ 4881 15, 56 N 200s and duplicates are (5/5) 15 (4/0)

paup:AB01 1.57 23, stupl 18.6306 1.2. These and the following lines are not treated in DVS 15.

$$\sim \int_{\mathbb{R}^d} |k|^{-1} |k'|^{-1} |k-k'|^{-1} dk = \int_{\mathbb{R}^d} |k|^{-1} dk$$

everything perfect" is part of a collection of incantations, some in Sumerian and others in Akkadian,⁷ known under the title HUL BA ZI ZI 'Begone, Evil!' literally 'Evil (HUL) Be gone (BA ZI ZI)'. The last incantation of the collection conjures the evil in the name of Jupiter, the Pleiades, and the god Irragal: 'Be conjured by the powerful, fearsome, brilliant Jupiter, by the Pleiades and Irragal, let any evil not come close.'⁸

A magic effect is sought by praying to a deity called First-born of Emah:

O First-born of Emah, First-born of Emah, you are the eldest son of Enlil.
You descended from Ekur, and you stand in the middle of the sky with the Wagon.⁹

The stellar nature of the divine being addressed is evident from the second line, where he is described as standing in the middle of the sky with the Wagon star. As for the astronomical identity of the "First-born of Emah" such a star, described as "first-born son of Anu," is listed in an astronomical compendium from about 1000 B.C.¹⁰ as the star that stands in the "rope" of the Wagon,¹¹ and has been identified with the Pole

⁷ MUL KAK SA SA MUL SA em-sa-id qabli maki-ir sa ur be-ni mu lak-hi mu ma Sa-ma SA 1: 21 s. 166-68 (duplicates KAK 7c-141 KAK 90c 10r in a short exclamation. By the Arrow star em-sa MUL KAK SA SA mu MUL KAK SA SA K UR 7c 1: 26r. and duplicates).

⁸ Part of this collection was first edited by Ebeling under the title 'Sammlungen von Beschwörungstexten' (as Gattung IV, An 6 21 (1953) 403-23).

⁹ It is being prepared for publication by F. F. Ebeling under this title. The title is taken from *Samma* in the last line but it seems that the subscript HUL BA ZI ZI refers to one of the preceding incantations, not necessarily to the entire collection.

¹⁰ mu ga-mu-ra-bu Sa-pi. Sub-pa-a-ni MUL MUL u Ir-ir-gal lu tamit mu-ma le-mu u rha SA 7: 24 s. 15-17.

EN DUMUL u SA MA-IR MUL u SA MA-IR apla rabu Sa Enlil attama
(lu Ekur) (u) damma ma apil Sa-me-ir MUL MA-IR ID MA 1422a2
[KAK 100c 10r (duplicate) 10r-12r
[CUL KAK 100c 10r (variant) 10r-12r. 10r-12r

(text from BA 51-547 10r-12r and dupl. ND 547 21 s. 14-19)

¹¹ MUL ABIS 1: 20r. edited by Hermann Hunger and David Pingree, *MfG* 1978.

¹² MUL Sa-ma tu-mu-1422a2 MUL MA-IR MUL u SA MA-IR mu-ma re-si Sa Anu 'the star that stands in its rope' (i.e. of MA-IR ID MA AN SA 'Wagon of Heaven,' Ursa Minor). Cf. Borzeld, *Zentr. und Aquatorialgestirne im babyl.*

trivial cases only. Thus, for example, the prayer to Mars in his manifestation as the god Nergal (the god of the plague) was to be recited by the Babylonian king Šamaš-šumu-ukin, the son of Esarhaddon, mentioned above, during a plague epidemic.⁷⁰ Rarely is reference made to phenomena most characteristic of the celestial body, such as the eclipse of the moon.⁷¹ Only in the Hymn to the Sun⁷² is there an allusion, clad in poetic terms, to the sun's daily course and yearly cycle, reflecting the Babylonians' characteristic preoccupation with calendric matters, a preoccupation that also surfaces in the description of the creation of the cosmos in Tablet VI of the Poem of the Creation, also known, from its incipit, as *Enuma eliš*.

Some prayers are written, it appears, in the Sumerian language, but in fact are simple transpositions of Akkadian phraseology into Sumerian words and phrases. They may have been recited – as in various rituals – by the priest or exorcist *utrukku lugina eriditu*⁷³ while the client's prayer was couched in the vernacular Akkadian. Such a prayer to be recited three times to avert "any evil"⁷⁴ from a baby, appeals to "Ninmah, standing in the sky, mistress of all lands"⁷⁵ and to the stars standing at the right and the left.⁷⁶ The "mistress" is probably Venus the morning star, and the prayer is to be recited before sunrise,⁷⁷ and is followed by a fragmentary prayer to the Sun, Šamaš, with this the tablet breaks off. We thus envisage a dawn ceremony in

⁷⁰ See Ebeling, *Die akkadische Keilschrift "Handelsbriefe"* (Berlin, 1957), 80f. and von Soden, *SATG* 300f. It is listed as Nergal I by Werner Mayer, *Internationale* (note 46 above) 402.

⁷¹ The well-known rituals to avert the evil portent of the eclipse, such as BRM 41, and the notorious "substitute king ritual" that such a portent necessitated under the Sargids are treated by S. Parpola in / 482 pp. xxv, xxvi.

⁷² Known to Assyriologists as the *Šamaš-hymn*, a 200-line learned composition for which see my book *Two Thousand Years: Two Meeting Rites of Poetry from Babylon to the Ussur* (Michigan Studies in the Humanities, 5) (Ann Arbor, 1983) chapter IV.

⁷³ Learned in both languages – see Tadeusz Kubiś, "Urukku lugina eriditu. Une page relative à l'histoire de l'éducation dans l'Afrique romaine," *Hommages à Marcel Riou*, vol. 2, coll. Latomus 102 (Brussels, 1969) 316–42.

⁷⁴ Akkadian *eriditu* *leminu*, possibly with a specialized meaning.

⁷⁵ | | Nin mah an na gob ba nin kur kur ta (line) LKA 142 6ff.

⁷⁶ For the "right" and "left" Yokestar (LKA 383 24) see above p. 15.

⁷⁷ *See Šamaš-hymn*, line 3.

which the morning star Venus was addressed, followed by a sunrise ceremony. Prayers to Venus as morning star, addressed as a female deity, are attested through the Middle Babylonian personal name Ina-niphiša-alsā 'I called to her at her rising.'⁵⁴

The unnamed star addressed as "You have risen" star, you are the first one"⁵⁵ no doubt also is Venus, this time, as the masculine gender of the pronoun and the adjective indicate, as evening star.

Lovers too turn to Venus, the planet of the goddess of love, Ištar. Their prayer is addressed to the goddess, but her astral character is evident from her epithet "luminary of heaven"⁵⁶ and from the sacrifices to Ištar-of-the-Stars.⁵⁷ The ritual directs: "you set up a reed altar before Ištar-of-the-Stars, you make offerings"⁵⁸ and, having prepared six times two figurines, "you burn (them) before Ištar-of-the-Stars."⁵⁹

A "woman whose husband is angry with her"⁶⁰ recites a prayer to Ištar,⁶¹ calling to her "in the midst of the sky."⁶² The

⁵⁴ JHS 2/233-26 and 32.

⁵⁵ MU 1 tappiḫa panu aṭṭa KAR 531. The pronoun aṭṭa 'you' and the adjective panu 'first' are masculines. See also the "unnamed star" quoted Chapter III.

⁵⁶ harmarat šamē see Biggs, *SA 7/1.3* p. 28-29 and see *CATN* 1 p. 261a.

⁵⁷ Ištar kakkabī see next note.

⁵⁸ ana [64-1] MU 1 MŠ variant [Ištar MU 1 MU 5] panu tukān niḫē harapp variant [ppp] Biggs, *SA 7/1.3* p. 270 (KAR 236 189) and duplicated lines [9f.], another ritual is probably also performed before Ištar-kakkabī ana [64-1] MU 1 MŠ 1 ibid. p. 65 & 90/6, also [ana R.1 95] MU 1 CATN ibid. 12. The readings given in *SA 7/1.3* p. 65 have been slightly emended in lines 10 rather AHe. s. v. 10/20 and 12.

⁵⁹ ana [2] ana [64-1] MU 1 MŠ šatarap see Biggs, *SA 7/1.3* p. 28-29.

⁶⁰ šat ša pām-šeṭ-ur ša šar-ur š77-257 r. 10 (subscript). I am indebted to my colleague Christopher A. Lutz for drawing my attention to the use of the šarōt to diminish anger between a woman and her husband; see his *Aphroditē & EPEIOS*, and *Apples for Ararat: Aphroditē-tas in Early Greek Myth and Ritual* (Tübingen 44) (1989) 222.

⁶¹ š77-257 rev. 2-9 listed as Ištar 28 in Werner Mayer, *Untersuchungen zur Formensprache der babylonischen Gebetsbeschwörungen* (Studia Bibl. Series Major 5) Rome: Biblical Institute Press, 1969, 392.

⁶² šarōt Ištar = ina qeṭib šamāna š77-257 rev. 51. Since astronomically such a position for Venus is excluded "midst" must be taken figuratively. The topos is also known from Sumerian, expressed as en ša ur, in e.g., the Iddin-Dagan hymn line 161 edited by Daniel David Reisman, "Two Neo-Sumerian Royal Hymns" (Ph.D. diss., University of Pennsylvania, 1969).

CHAPTER II

The Art of the Herbalist

for who can forget the powerful and noxious herbs of Medea, the enchanting herbs of Lucan, the fatal herbs of Claudius, the flourishing plants of Marco, and lastly those certainly plants, the which abundance was to be found in Colchos and Thessalia?

De herbis by Silius is written by M. L. H. Heucher (1780) edited by Edmund Mackdonald (FRHSLSA 1860). Privately printed, Edinburgh, 1888, pp. 11-12.

Among the many "firsts" that can be attributed to the Mesopotamians¹⁶ we may certainly count the first herbals and the first lapidaries, and a case may be made for the first bestiary too. The cuneiform handbooks can be compared to their later counterparts because they already exhibit their characteristic structure, and go beyond simple enumerations of stones and herbs we see in the Egyptian *Onomastica*.¹⁷ Such simple lists were among the very first documents written in Mesopotamia or indeed anywhere. The organizing principle they exhibit is due to the character of the cuneiform writing system.

In the Sumerian writing system names of members belonging to a class are preceded by a class mark, called "determinative," that indicates their nature; only in a few classes does the determinative follow. Names of professions and other human classes, as well as bodily characteristics or deformities, are preceded by the word for 'man' written with the sign *lù*:

¹⁶ For the role of the Sumerians, see Samuel Noah Kramer, *History Begins at Sumer* (Garden City, NY: Doubleday and Co., 1959), 3rd revised ed., with additions, with the subtitle *From Nine Cities to Man's Recorded History* (Philadelphia: University of Pennsylvania Press, 1963).

¹⁷ Alan H. Gardiner, *Ancient Egyptian Grammar* (Oxford: Oxford University Press, 1947), for which see Oppenheim, "Man and Nature in Mesopotamian Civilization," *OSS* 15 p. 634.

of textiles and clothing by the word for 'wool' (*sig*), 'linen' (*gula*), or 'cloth' (*tig*); of cities, rivers, and other geographical units by the appropriate determinative; similarly, objects made of wood, stone, clay, reed, etc., are preceded by a class mark indicating the nature of the item, the word for 'wood,' 'stone,' 'clay,' 'reed,' etc. Names of garden plants, birds, and fish are, however, followed by their respective class marks *sa*, *mušen*, and *ku*.

The earliest lists written in cuneiform, as early as the third millennium, simply catalogue objects or living beings; the principle of classification is obviously semantic, based on the presence of the determinative and therefore seemingly acrographic, that is, the items are grouped according to the first sign used to write them. Consequently, in any list, objects belonging to a particular class are listed together, and the classification according to the determinative doubles as a topical arrangement. This principle is useful for mnemotechnical and didactic purposes and at the same time displays a classification of the world, a feature that may be taken, with von Soden, as a sign of the intellectual curiosity of the Mesopotamian man.¹⁰ Similarly complex is the structure of the much later, late antique and medieval collections of lists and glossaries.¹¹

These Sumerian unilingual lists were eventually provided with an additional column of Akkadian translations, but their sequence remained the "acrographic" principle displayed by the Sumerian.

The best known such bilingual lists, consisting of a Sumerian column and a corresponding Akkadian column, form part of the series known, from its incipit, as *HAR-ra - hubullu*, a compendium of twenty-odd chapters enumerating objects of the physical world. In these lists a later commentary (called *HAR-gud*) adds a third column, also in Akkadian, which gives alternative translations, usually by substituting more common

¹⁰ Wolfram von Soden, "Entstehung und Grenze sumerischer und babylonischer Wissenschaft," in *Die Welt als Geschichte*, vol. 2 (Stuttgart, 1936), reprinted, with additions and corrections, in Benno Landsberger, *Die Eigen- und Fremdwörter der babylonischen Welt* (Darmstadt, 1965). See also Oppenheim, "Man and Nature in Mesopotamian Civilization," *DSB* 15 pp. 634ff.

¹¹ See James A. H. Murray, *The Evolution of English Lexicography*, The Romanes Lecture 1901.

words for terms of the second column that had become obsolete, without thereby changing the sequence or purpose of these lists. In certain cases the third column contains not just another equivalent or synonym, but an attempt at *scholion*; for example "Egyptian squash" to a variety of squash listed in Tablet XXIII¹⁰⁰ or "mourning garment" to explain the poetic word *karra* in Tablet XIX.¹⁰¹

Among the chapters¹⁰² of *HAR-ra* = *hidullu*, the XVIIIth, incompletely preserved, deals with plants. In it, the acrographic principle applies in the first section, where each plant name begins with the Sumerian word *u*, 'herb'. In the second section, the names are not preceded by *u*, but followed by *sar*, 'plant', the postposed class mark for such garden plants as vegetables, and other cultivated plants. Note that Greek too makes a distinction between *phoron* 'simple' (medicinal plant) and *laurovov* 'vegetable'.¹⁰³

Within a section no classificatory principle is discernible, except that varieties of the same species, whether botanically accurately classified or not, are by orthographic necessity enumerated together, as for example the alliaceae, whose names in Sumerian are composed with the element *sam* 'garlic' and a descriptive element, such as *sam sagadla* 'one-headed garlic'¹⁰⁴ while the Akkadian name is *tunū* or the cucurbitaceae, whose names are composed with *ukuš* 'squash' and a descriptive element, e.g. *ukuš šir gūd* with Akkadian equivalent *išku alpu* 'ox-testicle (squash)'.¹⁰⁵ These lists continued to serve as pedagogical tools for learning Sumerian.

¹⁰⁰ Hg. D 249.

¹⁰¹ Hg. 3-76 and duplicates. This explanation is also given in a late synonym list (Malku VI 61), which gives synonyms for rare or obsolete words.

¹⁰² Usually called 'tablets' in Assyriological parlance; see note 35.

¹⁰³ Cited Margaret H. Thomson, *Les grecs anciens tablettes aux plantes* (Paris: Les Belles Lettres, 1955) 91, and "Second traité alphabétique sur les plantes" (re d'Aetius).

¹⁰⁴ Literally (Sumerian) 'garlic-head-single'; see Marten Stol, *Bullfinch or Sumerian Agriculture?* 1 (1987) 57; compare also, e.g., PCAT IV 408.

¹⁰⁵ Literally (Sumerian) 'squash-testicle-ox'. Hb. XVII 377a and 31b, XXIV 310. Compare, e.g. *testiculus capris* = *Onchus*, *testis capris* = *Onchus militaris* L., cited Hermann Fischer, *Altägyptische Pflanzenkunde* (Hildesheim: Olms, 1967) 26, and *Onchus alpeus*, cited from the lexicon by Nicolas Hieronimus, in A. Delatte, *Avicenna alexandrina*, Bibliothèque de la Faculté

A more practical purpose was served by a work composed of four or possibly more chapters (again called "tablets") known from its incipit as *Uruanna* = *maštakal* or, for short, *Uruanna*. The two columns of this list place side by side two plant names. Sometimes the left-side entry is a Sumerian name and the right-side one its Akkadian equivalent as in the cited incipit; in other instances several left-side entries, either Sumerian or Akkadian, are equated with one (usually Akkadian) name. The explanation sometimes is a name that simply gives the indication: herb for snake bite!¹¹ (compare our "cough drop" or the trade name "After-Bite") or the plant is compared to another, better known plant or even, though more rarely, warrants a brief description quite similar to the entries in the Herbal (see p. 30). Sometimes to the term in the right-hand side is added the remark "in Subarian," "in Elamite," or "in Kassite," to specify that the name in the left column comes from one or another of the foreign languages of the areas surrounding Mesopotamia.

Uruanna could thus serve as a pharmaceutical handbook, used to look up Sumerian and other foreign names, and may also have served to indicate what herb could be substituted for another. The pharmaceutical as opposed to purely lexical character can also be inferred by the inclusion in the list of other pharmacological substances, such as minerals (including salts), insects, and oils.

Eventually, however, presumably around 1000 B.C., a different type of list was composed, a treatise that might more properly be called a precursor of herbals; in the Assyriological literature it usually goes under such a name as a "pharmaceutical handbook," or "vade-mecum of the physician." The ancient Babylonians simply called it DUB.U.HA "tablet about on herbs."¹² In outward appearance this list too is divided in three columns but not on linguistic grounds: the first column gives the name,

de philosophie et lettres de l'Université de Leipzig, t. 88, vol. 2 p. 408 line 14. Note also the names *šūhar* *imrūtān* (*Jungo* = Meltonast 'devil's horn'), Arabic *al-bāḥ-dīl* = penis lupi and *al-bāḥ-dīl* = desert penis quoted Immanuel Low *Die Flora der Juden* (Vienna and Leipzig: R. Löwit, 1926), vol. 1 p. 44 cited M. T. Wagner, *Babylonische Pflanzen* 4 (= Festschrift Liebig, 1937) 108 n. 1.

¹¹ Sameer nīšk-wīl, *Uruanna* I 391.

¹² Compare Ebeling, *KAT* 44 rev. 3; see Kocher, *RAM* V p. xi and n. 9.

Sumerian or Akkadian, of the plant, the second, the indication, that is, the symptoms or name of the disease it is supposed to counteract, and the third, the mode of application; how it is to be prepared (e.g. ground, diluted in beer) and how it is to be administered (e.g., as a potion, a salve, a lotion). The arrangement follows the middle column so that the herbs are grouped according to the disease they are good for, this layout is convenient for finding the remedies for a particular ailment by simply going down the middle column of the list.

For example: Yellow-saffron : for constricted bladder : to chop, to administer as a potion in fine beer, Kamš-acorn : for the same : to chop, to administer as a potion in fine beer; Garlic : for the same : to chop, to administer as a potion in oil or fine beer;¹⁰ Pistachio-herb : herb for the lungs : to chop, to administer as a potion without eating,¹¹ Dog's-tongue : herb for cough : to press out its juice and administer as a potion.¹²

This "vade mecum" has a counterpart that deals with stones, also simply called DUB-NA-MES "tablet about on stones",¹³ nevertheless, these compilations are only partially comparable to those of the late herbals and lapidaries.

The type of text that seems truly the precursor of the medieval handbooks is the one that I will call the *šikunšu* type, from the opening words. Three such handbooks are known, one (*tabnu šikunšu*) dealing with stones and minerals, another one (*šamnu šikunšu*) with herbs, and a third (*setu šikunšu*), of which only a small fragment survives, with snakes. These three books thus represent the three categories lapidaries, herbals, and bestiaries, of which latter the snake book is possibly the sole surviving chapter.

All three handbooks evince a common structure. Each entry begins the description with the word *šikunšu*, a word not easy to translate if we consider its literal meaning alone: the word *šikun* may mean "appearance, looks, character," and the like,

¹⁰ BAM I i 26-28.

¹¹ BAM I ii 24, see note 19.

¹² Ibid. ii 35. A text published by René Lohat, "La pharmacopée au service de la peste," *Sumeria* 3 (1970) 5-14, prescribes the use of herbs and other ingredients in order to secure healthy rain, as well as to avert evil and illness.

¹³ Cf. Ebeling, *AMK* 44 rev. 3, see *Texte apud Kocher, BAM* IV p. vii.

the possessive suffix *-šu*, 'its,' points back to the antecedent (*alnu* 'stone,' *šummu* 'herb,' or *šeru* 'snake'). If we take our cue from handbooks of a later period, we may choose the English term "nature," simply because medieval texts begin the description with this word (either with *natura*, if in Latin, or with the form equivalent to *natura* in the Romance language used).¹¹ And so we may translate the opening words as "The nature of the herb (stone, snake) is."

What these handbooks lack are the illustrations of the later herbals.¹² The absence of illustrations is only partly due to the nature of the writing and the writing material; illustrations, even though only rarely and mostly in schematic drawing, do appear on liver models and in some divinatory texts and on some clay tablets inscribed with liver omens to illustrate marks on the liver or lungs,¹³ or with physiognomic omens to illustrate drawings on the forehead or the hand, omens that may be taken as remote precursors of metoposcopy¹⁴ and chiromancy. There exist sketches to indicate the emplacement of paraphernalia in rituals and, even more rarely, in magic texts, as models of figures to be drawn.¹⁵ In lieu of illustrations, descriptions, often very precise, have to serve: they are couched, as in later herbals, in terms of the plant's resemblance to and difference from other plants with which it is compared.¹⁶

For example, "The herb whose nature is like the *ambara* plant's, (but) its leaves are small, and it has no milky sap, its

¹¹ For example: "La natura del pavon es asial . . ." "La natura de la turnez es asial . . ." *Der waldensische Physiologus*, ed. Alfons Mayer, *Romanische Forschungen* 5 (1886) 360-418, nos. 4 (Pavon) and 42 (De la turnez).

¹² Illustrations appear late also in Byzantine, Arabic, and other later herbals.

¹³ See Neugebauer, *SA* 68 (1971) 611.

¹⁴ Angus C. Clarke, "Metoposcopy: An Art to Find the Mind's Construction in the Forehead," in *Anthropology, Science and Society: Historical Essays*, Patrick Querey, ed. (Woodbridge, Suffolk: The Boydell Press, 1987) 171-95.

¹⁵ See Reimer, "Magic Figures: Amulets and Talismans," in *Monsters and Demons in the Ancient and Medieval World: Papers Presented in Honor of Edith Brada*, Ann E. Farkas et al., eds. (Mainz on Rhine: Philipp von Zabern, 1988) 27-36.

¹⁶ Texts: Kocher, *Pflanzenkunde* 33, 34b, and 35; see Reimer, *Bibliotheca Orientalis* 15 (1958) 102; BAM 327, 329 and dupl. Egbert von Weihen, *SpTII*, vol. 3 no. 106; *STT* 93.

seed resembles linseed, that plant is called *lahubitu*. The herb whose nature is like that of the *anbara*-plant's, but its seed is red like that of the *abubtu*-plant, that herb is called [. . .], it is good for removing paralysis: to dry, to crush, and to apply as a salve (mixed) in oil.¹²³

Or: "The herb's nature is: its thorn is like the thorn of cress, its leaves are as large as cress leaves, that herb is called *namhara*, whoever drinks it will die."¹²⁴

An even more detailed description runs: "The herb's nature is like that of the 'dog's tongue' or, according to a second source, like the *hathappam*-herb: its leaves are long, its fruit is like the Adad-squash,¹²⁵ it grows tall, its seed, like the *tubapu* plant's, is divided¹²⁶ in three: that herb is called *sumati*, and in the language of Hatti they call it *tubapam* [that is, the *tubapu*-like herb], it is good for scorpion sting, its mode of preparation: to dry, to crush, to administer as a potion in beer."¹²⁷

Obviously, these descriptions are very much like those found not only in herbals such as Dioscorides,¹²⁸ but also in the spells collected in Hellenistic magical papyri, written in Greek¹²⁹ or in Demotic, as in "The ivy - it grows in gardens, its leaf is like the leaf of a *shetam* plant, being divided into three

¹²³ Kocher, *Pflanzentafeln* 33.4-7.

¹²⁴ Kocher, *Pflanzentafeln* 33.12-13.

¹²⁵ Written with the Sumerogram L, LUGAL 481.

¹²⁶ The verb form used is *amrad*.

¹²⁷ Kocher, *Pflanzentafeln* 33.15-16.

¹²⁸ E.g., "Incensum folia habet, ampla porro, sed oblonga et tenuiora," Dioscorides, *Longobardus*, Book I.5c, *De quiperu mibwa*, ed. Konrad Hotmann, J. M. Auzoulet, *Romanische Forschungen* 1 (1883) 58. Or also: "Polygonum masculus aut catenatorum aut . . . vocant. Frla est virga habens teneras molles et multas nodosus, sparsa super terra, sicut agrostis. Folia habet rotunda, sed oblonga et mollia. Semen habet foliis singulis, unde et masculus dictus est: there alter aut tenerum habens. Virtus est illi stupida et frigida, unde sinus eius bibulus emphoricus medicatur." *De polygono tenuia*. "Polygonum tenuia trites est: i. Virga habens, mollis et carnosae, . . . omnia suprascripta facere potest, sed minus virtute habet." Dioscorides, *Longobardus*, Book IV.11c. d. *De polygono*, ed. Hermann Stadler, *Romanische Forschungen* 11 (1903) 111-12. Dioscorides IV.41. For Dioscorides see now John M. Riddle, *Dioscorides on Pharmacy and Medicine* (Austin: University of Texas Press, 1985).

¹²⁹ For example, *PGM* IV.798-810.

lobes like a grape-leaf. It is one palm in measurement; its blossom is like silver (another [manuscript] says gold)."¹²

Some of the more exotic names raise the question whether names designating parts of the body of animals that are listed among the *pharmaka* actually refer to animal substances or are to be taken as descriptive names of plants, as the "dog's tongue" in the previous quote, a literal translation from Akkadian,¹³ equivalent—in name at least—to *cynoglossum*. R. Campbell Thompson thought that "The Assyrian was as ready to call what was almost certainly opium by name of 'lion fat' (*lipi neshi*) or 'human fat' (*lipi amaduti*) or castor oil as 'the blood of a black snake' (*damu seru salutu*) as later alchemists were to give ridiculous synonyms for mercury, cinnabar, cadmia, and such."¹⁴

That some of the strange names were indeed used to refer to plants is shown by an often quoted passage from the Greek magical papyri:¹⁵

Because of the masses' eagerness to practice magic, the temple scribes inscribed the names of the herbs and other things which they employed on the statues of the gods, so that the masses, as a consequence of their misunderstanding, might not practice magic. But we have collected the explanations [of these names] from many copies [of the sacred writings], all of them secret.

Here they are:

A snake's head: a leech

Blood of a snake: haemate

Lion semen: human semen

¹² Demotic Magical Papyrus MV 775, translated by Janet H. Johnson in *The Greek Magical Papyri in Translation*, H. D. Bethe (ed.), Chicago and London: University of Chicago Press, 1960, 234.

¹³ Akkadian *šar*, "dog's tongue/tongue," the corresponding Sumerian compound is *šar-gar*.

¹⁴ 1936, 1, p. viii, cited disapprovingly by Dorothea Casitz, *Studien zur Geschichte der Alchemie oder Pharmazie, Chemie und Medizin vor der Aufklärung* (Leipzig: S. 1936), Archiv. Bohrer 14 (Münster: Franz Steiner 1972). Note also the article "Magia" in Hopfner, 61, 27 (1928), III, 93, and especially the Latin names of remedies indicated by Artemidorus, *Oneirocritica* 1, 22 (Bach, Teubner 1963; French translation, *Artemidore, La Clé des songes*, transl. A. L. Festugière [Paris: Vrin 1975]).

¹⁵ Papyrus Leiden in 17b, 1, 663A II 400ff. cf. Hopfner, *Orientforschungen*, vol. 1 §493, also Dioscorides, cited Hopfner, *ibid.* §494.

Semen of Hermes: dill
 Blood from a head: lupine
 Blood of Hephaistos: Artemisia
 Human bile: turnip sap
 Fat from a head: spurge
 but "blood of porcupine" really from the porcupine."¹⁰

Yet, we might question whether these terms were indeed used as "secret" names as the papyrus indicates. The use of "secret" or "cover" names (German: "Decknamen") is not necessarily intended to keep the craft or learning from the uninitiated or, in case of a lucrative profession, from the competition. Complicated and rare words and spellings may simply attest to the sophistication of the writer, and enhance his reputation. The practice may be comparable to the use of outlandish sign values in a Middle Babylonian glass text, once thought to have been used to safeguard professional secrets.¹¹

Still, late herbals speak of these substances as if they indeed were animal (see note 110). Other plant names are less fanciful, even though they may betray wishful thinking, *imhar-ekka* 'it cures twenty'-that is, twenty ailments, and even *imhar-lima* 'it cures a thousand,' just as in Hungarian there is an herb called *cserjefű*, 'thousand-good-herb.' The German *tausendgoldenkraut*, literally 'thousand-gold-pieces-herb,' on the other hand, seems to be a calque on Latin *centaurium* (compare English centaur), etymologized as 'hundred' (*centium*) 'gold pieces' (*aurum*).¹² The name of the herb centaur (Greek *κένταυρος*) is said to derive from the word Centaur, so named after the centaur Chiron, who healed his wound with it.¹³

¹⁰ *ibidem*; *commentationes*, IV:54-55:404.

¹¹ For the use of outlandish sign values in the Middle Babylonian glass text and the implications of this scribal practice see A. Leo Oppenheim, *Glass and Glassmaking in Ancient Mesopotamia* (Ithaca, NY: The Corning Museum of Glass, 1970) 59ff.

¹² See *Handbuch der deutschen Aberglaubens*, x.

¹³ Suggested by Reinhold Streimberg, *Conchus in Pflanzennamen* (Cottbus: Hergskolas, Arsschrift 46, 1940) I (Cottbus, 1940) 100. "Man hat geglaubt, dass Chiron diese Heilpflanze zuerst versendet hatte." He is followed by the Greek etymological dictionaries of Frisk and Chantraine. The connection of the plant with Chiron comes from Theophrastus, *Historia Plantarum* 3.36 and Pliny, *NH* 25:86.

In ancient natural histories it is often added to the description of the plant that the species comes in two sexes: male and female, as the above cited *polygonum* (see note 128). These designations have nothing to do with the plant's sex essential for propagation, but refer to its potency. This is evident from the fact that stones too—that is, beads of semi-precious stones—come in both masculine and feminine varieties; this was known in Greek literature since Theophrastus (end of the 4th c. B.C.) but, like many small and perhaps insignificant details of the transmission of beliefs and knowledge, harks back to Babylonian sources. Not only Classical authors¹²⁸ noted this division but modern jewelers as well.¹²⁹ The division of *materna medica* into masculine and feminine is well known from Greek and Latin authors; according to commentators, among them Pliny the Elder, masculine herbs are stronger and more effective than the feminine ones. Note *mascula tuta* "male incense" in Virgil,¹³⁰ explained by the commentator as *mascula tuta, id est fortis* "male incense, hence stronger."¹³¹ In Babylonian

¹²⁸ J. J. Guillet, *Virgil's Georgics: The Middle Ages and the Renaissance* (Oxford: Clarendon Press, 1922; republished New York: Dover, 1960) 15. See also for Pliny: *NH* 16.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100.101.102.103.104.105.106.107.108.109.110.111.112.113.114.115.116.117.118.119.120.121.122.123.124.125.126.127.128.129.130.131.132.133.134.135.136.137.138.139.140.141.142.143.144.145.146.147.148.149.150.151.152.153.154.155.156.157.158.159.160.161.162.163.164.165.166.167.168.169.170.171.172.173.174.175.176.177.178.179.180.181.182.183.184.185.186.187.188.189.190.191.192.193.194.195.196.197.198.199.200.201.202.203.204.205.206.207.208.209.210.211.212.213.214.215.216.217.218.219.220.221.222.223.224.225.226.227.228.229.230.231.232.233.234.235.236.237.238.239.240.241.242.243.244.245.246.247.248.249.250.251.252.253.254.255.256.257.258.259.260.261.262.263.264.265.266.267.268.269.270.271.272.273.274.275.276.277.278.279.280.281.282.283.284.285.286.287.288.289.290.291.292.293.294.295.296.297.298.299.300.301.302.303.304.305.306.307.308.309.310.311.312.313.314.315.316.317.318.319.320.321.322.323.324.325.326.327.328.329.330.331.332.333.334.335.336.337.338.339.340.341.342.343.344.345.346.347.348.349.350.351.352.353.354.355.356.357.358.359.360.361.362.363.364.365.366.367.368.369.370.371.372.373.374.375.376.377.378.379.380.381.382.383.384.385.386.387.388.389.390.391.392.393.394.395.396.397.398.399.400.401.402.403.404.405.406.407.408.409.410.411.412.413.414.415.416.417.418.419.420.421.422.423.424.425.426.427.428.429.430.431.432.433.434.435.436.437.438.439.440.441.442.443.444.445.446.447.448.449.450.451.452.453.454.455.456.457.458.459.460.461.462.463.464.465.466.467.468.469.470.471.472.473.474.475.476.477.478.479.480.481.482.483.484.485.486.487.488.489.490.491.492.493.494.495.496.497.498.499.500.501.502.503.504.505.506.507.508.509.510.511.512.513.514.515.516.517.518.519.520.521.522.523.524.525.526.527.528.529.530.531.532.533.534.535.536.537.538.539.540.541.542.543.544.545.546.547.548.549.550.551.552.553.554.555.556.557.558.559.560.561.562.563.564.565.566.567.568.569.570.571.572.573.574.575.576.577.578.579.580.581.582.583.584.585.586.587.588.589.590.591.592.593.594.595.596.597.598.599.600.601.602.603.604.605.606.607.608.609.610.611.612.613.614.615.616.617.618.619.620.621.622.623.624.625.626.627.628.629.630.631.632.633.634.635.636.637.638.639.640.641.642.643.644.645.646.647.648.649.650.651.652.653.654.655.656.657.658.659.660.661.662.663.664.665.666.667.668.669.670.671.672.673.674.675.676.677.678.679.680.681.682.683.684.685.686.687.688.689.690.691.692.693.694.695.696.697.698.699.700.701.702.703.704.705.706.707.708.709.710.711.712.713.714.715.716.717.718.719.720.721.722.723.724.725.726.727.728.729.730.731.732.733.734.735.736.737.738.739.740.741.742.743.744.745.746.747.748.749.750.751.752.753.754.755.756.757.758.759.760.761.762.763.764.765.766.767.768.769.770.771.772.773.774.775.776.777.778.779.780.781.782.783.784.785.786.787.788.789.790.791.792.793.794.795.796.797.798.799.800.801.802.803.804.805.806.807.808.809.810.811.812.813.814.815.816.817.818.819.820.821.822.823.824.825.826.827.828.829.830.831.832.833.834.835.836.837.838.839.840.841.842.843.844.845.846.847.848.849.850.851.852.853.854.855.856.857.858.859.860.861.862.863.864.865.866.867.868.869.870.871.872.873.874.875.876.877.878.879.880.881.882.883.884.885.886.887.888.889.890.891.892.893.894.895.896.897.898.899.900.901.902.903.904.905.906.907.908.909.910.911.912.913.914.915.916.917.918.919.920.921.922.923.924.925.926.927.928.929.930.931.932.933.934.935.936.937.938.939.940.941.942.943.944.945.946.947.948.949.950.951.952.953.954.955.956.957.958.959.960.961.962.963.964.965.966.967.968.969.970.971.972.973.974.975.976.977.978.979.980.981.982.983.984.985.986.987.988.989.990.991.992.993.994.995.996.997.998.999.1000.

¹²⁹ Les pierres précieuses masculines sont celles qui possèdent une couleur plus vive les féminines celles qui ont une couleur plus pâle" (J. Rosati, *Les pierres précieuses masculines et féminines*, Paris: Les Belles Lettres, 1985) 37. Theophrastus, *Historia Plantarum*, 1.1.1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100.101.102.103.104.105.106.107.108.109.110.111.112.113.114.115.116.117.118.119.120.121.122.123.124.125.126.127.128.129.130.131.132.133.134.135.136.137.138.139.140.141.142.143.144.145.146.147.148.149.150.151.152.153.154.155.156.157.158.159.160.161.162.163.164.165.166.167.168.169.170.171.172.173.174.175.176.177.178.179.180.181.182.183.184.185.186.187.188.189.190.191.192.193.194.195.196.197.198.199.200.201.202.203.204.205.206.207.208.209.210.211.212.213.214.215.216.217.218.219.220.221.222.223.224.225.226.227.228.229.230.231.232.233.234.235.236.237.238.239.240.241.242.243.244.245.246.247.248.249.250.251.252.253.254.255.256.257.258.259.260.261.262.263.264.265.266.267.268.269.270.271.272.273.274.275.276.277.278.279.280.281.282.283.284.285.286.287.288.289.290.291.292.293.294.295.296.297.298.299.300.301.302.303.304.305.306.307.308.309.310.311.312.313.314.315.316.317.318.319.320.321.322.323.324.325.326.327.328.329.330.331.332.333.334.335.336.337.338.339.340.341.342.343.344.345.346.347.348.349.350.351.352.353.354.355.356.357.358.359.360.361.362.363.364.365.366.367.368.369.370.371.372.373.374.375.376.377.378.379.380.381.382.383.384.385.386.387.388.389.390.391.392.393.394.395.396.397.398.399.400.401.402.403.404.405.406.407.408.409.410.411.412.413.414.415.416.417.418.419.420.421.422.423.424.425.426.427.428.429.430.431.432.433.434.435.436.437.438.439.440.441.442.443.444.445.446.447.448.449.450.451.452.453.454.455.456.457.458.459.460.461.462.463.464.465.466.467.468.469.470.471.472.473.474.475.476.477.478.479.480.481.482.483.484.485.486.487.488.489.490.491.492.493.494.495.496.497.498.499.500.501.502.503.504.505.506.507.508.509.510.511.512.513.514.515.516.517.518.519.520.521.522.523.524.525.526.527.528.529.530.531.532.533.534.535.536.537.538.539.540.541.542.543.544.545.546.547.548.549.550.551.552.553.554.555.556.557.558.559.560.561.562.563.564.565.566.567.568.569.570.571.572.573.574.575.576.577.578.579.580.581.582.583.584.585.586.587.588.589.590.591.592.593.594.595.596.597.598.599.600.601.602.603.604.605.606.607.608.609.610.611.612.613.614.615.616.617.618.619.620.621.622.623.624.625.626.627.628.629.630.631.632.633.634.635.636.637.638.639.640.641.642.643.644.645.646.647.648.649.650.651.652.653.654.655.656.657.658.659.660.661.662.663.664.665.666.667.668.669.670.671.672.673.674.675.676.677.678.679.680.681.682.683.684.685.686.687.688.689.690.691.692.693.694.695.696.697.698.699.700.701.702.703.704.705.706.707.708.709.710.711.712.713.714.715.716.717.718.719.720.721.722.723.724.725.726.727.728.729.730.731.732.733.734.735.736.737.738.739.740.741.742.743.744.745.746.747.748.749.750.751.752.753.754.755.756.757.758.759.760.761.762.763.764.765.766.767.768.769.770.771.772.773.774.775.776.777.778.779.780.781.782.783.784.785.786.787.788.789.790.791.792.793.794.795.796.797.798.799.800.801.802.803.804.805.806.807.808.809.810.811.812.813.814.815.816.817.818.819.820.821.822.823.824.825.826.827.828.829.830.831.832.833.834.835.836.837.838.839.840.841.842.843.844.845.846.847.848.849.850.851.852.853.854.855.856.857.858.859.860.861.862.863.864.865.866.867.868.869.870.871.872.873.874.875.876.877.878.879.880.881.882.883.884.885.886.887.888.889.890.891.892.893.894.895.896.897.898.899.900.901.902.903.904.905.906.907.908.909.910.911.912.913.914.915.916.917.918.919.920.921.922.923.924.925.926.927.928.929.930.931.932.933.934.935.936.937.938.939.940.941.942.943.944.945.946.947.948.949.950.951.952.953.954.955.956.957.958.959.960.961.962.963.964.965.966.967.968.969.970.971.972.973.974.975.976.977.978.979.980.981.982.983.984.985.986.987.988.989.990.991.992.993.994.995.996.997.998.999.1000.

¹³⁰ *Eclogues*, 1.1.1.

¹³¹ *Pharmacology*, 2.1.1. Pliny, *NH* 12.61. note also *fortis cum tunc masculis*.

medical texts the substance UB 1AD (to be read probably *uppatu* or *uppatu*) comes in male and female varieties.¹³⁷

Sometimes the etymology of the name is transparent. While 'sunflower' (in ETL *šamū šamaš*) probably describes any heliotrope, that is, a flower that always looks at the sun: 'the flower of Šamaš that faces the setting of the sun.'¹³⁸ Other names composed with a name of a god or goddess are more suggestive. We do not know to what botanical species for example the herb called 'Sinurta's aromatic' (Sumerian *šim Ninurta*, equated in Akkadian with *ukapita*)¹³⁹ refers, both varieties of which, masculine and feminine, are mentioned in recipes; however, the name of the herb called *šim Išara*, 'aromatic of the goddess Išara,' which is equated with Akkadian *qanabtu*, 'cannabis,'¹⁴⁰ may indeed conjure up an aphrodisiac through the association with Išara, goddess of love, and also calls to mind the plant named *ṭum Išar*, in Akkadian *ṣuṣa Išar* or *maṣ Išar*, both meaning 'bed of Išar.'

The pharmaceutical lists, whether of the *Urimma* or the *Šakina* type, provide the physician or the pharmacist with the knowledge about the appropriate herb to be used for a particular ailment. However, it is important to know not only your roots and herbs, and what they are good for but also the proper time and manner for picking the herb or digging up the root, so as to maximize its healing power and – not least, to guard against the evil consequences of your acts. Then, and perhaps most important, one has to know the proper time to administer the medicine, by selecting an astrologically propitious moment. A sixteenth-century doctor urged: 'Above all things next to grammar, a physician must have surely his Astronomy, to know how, when and at what time every medicine ought to be administered.'¹⁴¹

crushed with male incense. Dioscorides (Combardus) II 483 (*Recherches de Pharmacie* 10 [1899] 234).

¹³⁷ AAT 104.15.

¹³⁸ *šamū šamaš ša ana ereb šamū pamišā sakru* AAT 74 n. 27, cf. KBu 44 r. 10b.

¹³⁹ The Akkadian word is probably derived from the Sumerian word *lylfe* which is the gloss given to the compound *šim Ninurta*.

¹⁴⁰ AAT 73 (1983) 243 no. 12. Compare the solution of variant 151 (cf. 102) in-rih in the medical text CT 55 377.4.

¹⁴¹ Katherine Oldmeadow, *The Anatomy of Herbs* (Birmingham, n.d.) n. 60.

The rules and precautions to be followed at the gathering of a plant are not set out in the pharmaceutical handbooks; they have to be culled from prescriptions in medical texts and some rituals. The directions given to the herbalist are very similar to those observed by the 'root-cutter' (the literal translation of Greek *rhizotomos*) in antiquity, in the Middle Ages, and in folk medicine, as collected in Armand Delatte's *Herbarius*,¹⁴⁷ to which these examples from Mesopotamia may serve as supplement:

Look for a gourd which grows alone in the plain;
when the Sun has gone down
cover your head with a ketchnet,
cover the gourd too: draw a magic circle with flour around it,
and in the morning, before the Sun comes out,
pull it up from its location,
take its root.¹⁴⁸

These instructions specify the time for picking the plant, and the precautions to be observed in regard to both the plant and the herbalist. The scene is night (between sunset and sunrise), the plant is isolated by a magic circle and covered; and the herbalist protects himself by covering his head.

Nighttime may be specified in other ways: sometimes it is sufficient to say that the sun must not "see" the herb; for example, a root "which the sun did not see when you pulled

preparing and administering the medicine at a propitious moment see Chapter III.

¹⁴⁷ Armand Delatte, *Herbarius: Recueil des prescriptions et conseils relatifs à la cueillette et à l'usage des plantes médicinales* (Bibliothèque de l'Académie Royale de Belgique, Classedes Lettres 4-22) (1906; reissued Paris: Droz, 1970).

¹⁴⁸ *u-ku-ru-gal-lu-an-si-lu-na-as-si-mu-ur* "U-tu-e-a-na-ku-ru-na-tu-gal-sag-zu u-mu-ru-dul u-ku-ru-gal-lu-na-mu-ru-dul-ud u-mu-ru-hur u-gu-zu-za-ka." *Utu nam-ta-e-ku-gub-ba-an-na-ta u-mu-ru-si-mu-er-na bi-ka u-mu-ru-tigilla-ka ma-ve-ru-edi-655u-asu-kina Samas-ana-bi-ru-er-ru-si-ba-ta qa-qa-dka kutim-ma-tigilla kutim-ma-penia-si-mu-ana-ku-ru-lam-Sag-ru-za-za-na-mu-ru-za-ku-ru-si-ku Samas-Sag-ru-za-za-na C 1 17-19; 17-24 and dupls. Egbert von Weiber, *SplT*, vol. 2 no. 2 (29 letters) (see Berger, *HAT* 2 (1975) 280. The translation "gourd" here used is intended to serve as allusion to the gourd (Hebrew *quation*, see Jack M. Sasson, *Leah: The Anchor Bible*, vol. 24B [New York: Doubleday, 1981] 291) that provided shade for the prophet *le-nah*; other terms such as *squash*, *cucurbit*, *melon* are equally possible translations of the Akkadian word, for which see M. Stol, *Bibliotheca Mesopotamica: Agriculture* 3 (1967) 84ff.*

present intended for you, now give me the plant of life."¹⁴ At the very least, the herbalist must propitiate the plant by speaking a greeting or a prayer, for which I may again quote Pliny (NH 25 145): "Some instruct the diggers [of the pimpinell] to say nothing until they have saluted it before sunrise, and then to gather it and extract the juice, for so they say its efficacy is at its greatest." Even Christian monks recommended that while gathering herbs it would be holy to speak the salutation:

All hail, thou holy herb, serving,
Crawling on the ground!¹⁰

The two-edged sword, or any other tool used, must not be made of iron, a precaution that is well known from Classical Greek and Latin texts, as can be seen from a passage in Pliny's *Natural History* (24 103): 'The plant called *selago* is gathered without iron with the right hand, thrust under the tunic through the left armhole, as though the gatherer were thieving'.¹⁰ The earliest attestation for this practice too comes from Babylonia, as was recognized as early as 1941. The Babylonian herbalist, too, draws a circle around the herb, in the cited text¹¹ with flour, in other recipes with an instrument but not with one made of iron. The precaution of approaching the herb the head covered with a cloth and covering the plant itself seems aimed at 'blinding' the plant so that it does not recog-

1451. 1. 18. *Asaphodes* *ma-sapal* 1. 18. *sa-eh* *pin-pu* *asū* *tatabuk* *klam* *lapla* *gama* *ama* *putak* *matihata* *lawewa* *sa-balan* *ndawarna*. B.A.B. 248 v. 34. dupl. 1957. 07. 11. 25. Incidentally not only plants receive a bakslush for valding up their bounty (for offerings to plants, described in Phny, see the references collected by H. Müller, *Phnom Penh* [note 147 above]) but also other participants in the magic activities, the claypit *chehat* from which the clay for *Asaphodes* figures is taken (*Phnom Penh*, 20. 128. 5) and the river that carries away the contaminated material (B.A.B. 227. 18, see Erich Habel, *Jed und Leben auf dem Ufer* [*Ufer* = *Ufer* der *Bakslush*] [Berlin and Leipzig: de Gruyter & Co., 1983], 128).

285. Cf. "Eradicating herbs growing in the ground," as quoted in Katherine Alderman, *Excavation: A History* (Birmingham, n.d.), n.

"... que l'été de nos jours per-turbum qua vinifera exantur volat a
turante" quoted Foddy (*Recherches*, note 147 above) 179. La pp. 139ff., with
various misapprehensions—e.g. "lesottes qui recourent la main sert d'isolateur."

nize the herbalist.¹⁰ The reference to "as though . . . thieving" also indicates that the gatherer of the herbs pretends to be someone else, so as not to bring down upon himself the herb's revenge, an evil from which the Babylonian herbalist would have protected himself by an apotropaic ritual, but I know of no such ritual.

The plant "growing alone in the plain" or the "lone tamarisk" is singled out already by its habitat; "other habitats are also singled out as significant. Especially effective, apparently, are plants growing on a grave (Akkadian *limāhlu*), as the texts often specify: "root of camel thorn from a grave, root of an acacia-shrub from a grave"¹¹ or "acacia-shrub which grew on a grave."¹² Compare:

lulbet-sepuleris caprificos erutas
rubet cupressos runcibris adun

"(Camel) orders wild fig trees uprooted from the tombs, funeral cypresses."¹³

Most efficacious are plants growing in the mountains, there on the mountains' heights they are better exposed to the influence of the stars, not only because they are closer to them but also because the atmosphere is thinner.¹⁴ Among addresses

¹⁰ " . . . nous reconnaissons quelques précautions parmi les plus courantes. L'honneur du premier contact et celle de la netteté, qui sont surtout de nature à délaissier plutôt que d'écarter, et surtout le cercle magique délimité autour de la plante. Le plus souvent, il est tracé sur le sol, avec un instrument tranchant en fer, qui l'enfonce assez profondément dans notre terre, il sera dessiné avec de la fumée répandue. Pourquoi un cercle? C'est peut-être symboliquement une prise de possession isolant la plante de tout secours, mais aussi une véritable purification, le cercle la soustrayant aux mauvaises influences extérieures. Une particularité de ce rituel est l'approche . . . la tête couverte d'un vêtement . . . cette précaution se double de celle de couvrir la plante elle-même, le but visé paraît être d'écarter la plante et d'empêcher que l'herbiste soit contaminé elle . . ." Cf. Cornuau, *Herbarius*, 84-86 (1941), 51-52, ad 16-32, 32-41, now 63-67, 69, cited above.

¹¹ For the "lone (or single) palm tree," see Babylonian Talmud 47*sa* *hullin* 111; also 111, cited Strack-Billerbeck, vol. 4, p. 518.

¹² *šamšuballu ša rā' limāhlu* [tamarisk] *šatru' asuq*, *ša rā' kumāhlu*, 3547-402, 38.

¹³ *asagu ša ana mulhi kumāhlu ase*, 3547-400, 7, 17, and *passim*.

¹⁴ *Fluore*, 1, col. 3, 17 sq. Note also 42 *šug*, *inveniat per busca iacrola plumae*, "a screech-owl's feathers found among sunken tombs." *Propertius* III 4, 29.

¹⁵ See the texts quoted by Hopfner, *Chrestomathie*, vol. I, 486f.

to herbs whose healing properties are sought: several begin by describing the plant as mountain-grown: "The heartsease grows in the mountains."

Herbs can serve not only to heal but also to diagnose a condition. The patient's reaction to a medicine may very well indicate what his illness is and what the prognosis may be. Rare as they are, the attestations of this diagnostic method indicate that they may have been used more often than the extant texts reveal. One of the few is a Babylonian medical text that testifies to the use of a soot-to-speak patch test. The sick man is bandaged with a poultice made of ingredients that act as an irritant and produce a blister. After having applied the poultice for three days, on the fourth day you remove it and inspect the blister that was produced by the poultice. The color of the blister, whether it is white, red, yellow, or black, will predict the course of the man's illness. "If the blister is white, his intestines will quiet down; if it is red, his intestines hold too much heat; if it is green, (the affliction is due to) overexposure to sun; if it is black, the affliction will cause him withering and he will not live."¹⁰ Only after the diagnosis is made does the physician apply a medication to alleviate the condition provoked.

A similar test is described in a recently found medical text from Emar on the Euphrates.¹¹ The *chopai* herbs for 'leprosy' with a fig tree branch, he grinds figs and raisins and ties them on in a bandage; on the next day at night he removes them; if they are white, he replaces the bandage; on the third day he

¹⁰ *Sursumu* 12, *Sursumu* 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

¹¹ *Sursumu* 12, *Sursumu* 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

¹² *Sursumu* 12, *Sursumu* 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418,

removes them, if they are white, he replaces the bandage. (but) if the white (color) disappears or if their white (color) is not absorbed' he crushes them with an obsidian stone . . . if the surface of his wound is uniformly red, he strews 'bitter barley' (etc., over it) and he will get well. if he does not get well, you keep placing a bandage (made with various ingredients) on him and he will get well."

A rare pregnancy testing text from Babylonia has also come to light. It was used to test whether a woman is able to conceive. The test consists of inserting a pessary made from medications wrapped in a wad of wool, or of giving the woman a potion to drink. If the potion causes her to vomit, she is pregnant; if the wad of wool has turned green, she is pregnant. While similar tests had been known from Egyptian medicine, and they have been compared with Classical parallels,¹⁰ the newly identified Babylonian pregnancy test is the first Mesopotamian example of this practice.¹¹

The fame of Babylonian herbalists is attested in a ninth-century A.D. Arabic book known as *Nabulani Agriculture*, which reports that certain medicinal plants were introduced by Babylonian kings, whose names it lists.¹² In fact, we know from Babylonian medical texts that certain salves¹³ and strings of amulet stones were attributed to a famous king of the past, for example, to Hammurapi, Naram-Sin, and Rim-Sin.¹⁴ Another, perhaps not quite trustworthy, witness to the fame of

¹⁰ Erik Ivarsen, *Papyrus-Geschichte, N. I, III, with Some Remarks on the Egyptian Origin of Some Ancient Birth-Prophecies*, Kgl. Danske Videnskabsnernes Selskab, Historisk-filologiske Meddelelser 26b (1959), and I. B. deL. 54. Saunders, *The Papyri of the Ancient Egyptian Medical Papyri*, University of Kansas Press, 1963, 35-36. See also the article "Emphysema" by Erna Lönn, *ibid.* 4 (1960), 248-52.

¹¹ The text is edited and commented on in Erica Reiner, "Babylonian Birth Prophecies," *J.A.S.* 72 (1952), 124-58.

¹² D. Chwolson, *Öber die Ursprung der arabischen Pflanzenkunde nach Nabulani'schen Übersetzungen* (St. Petersburg, 1889), 12-1. Unfortunately, the new translation of the *Nabulani Agriculture* announced by J. Tabak has not yet been published.

¹³ Esq. m. Sa Hammurapi Laku, proven ex-salve from Hammurapi (BM 159 iv 22, Esq. m. Sa Hammurapi Laku, E. G. von Weibst, *SpH* 17, Vol. 2, no. 50-12).

¹⁴ See Chapter VII.

Babylonian drugs is the woman scorned in Theocritus' *Second Idyll* who swears

If he continues to grieve me, I call on the Fates as my witness
 Soon he shall knock at the portals of Hades, such sinister drugs I
 keep in my medicine chest, which I learned about from a
 Chaldean.¹⁷

¹⁷ Theocritus 2.160-162, translated by David Hine, *Theocritus Idylls and Epigrams* (New York: Atheneum, 1982) (Greek: *παύσινα* . . . *Αναδύομαι* . . . *ταπεινὰ γαστρίῳ μολοίω*).

CHAPTER III

Medicine

for when those who first wrote on the subject gave their attention almost solely to medicine, its art, the state, and believed natural philosophy, and the tendency, going together, naturally connected with those heavenly bodies, they disseminated seeds of magic, from which that science grew to such a degree that it over-spread the whole world with its pollution.

Platonica Veteris, Magic Plants, being a translation of a curious tract entitled *Platonica Magica*, written by M. J. H. Heusler, 1790, edited by Edmund Goldsmid, F.R.S.E. & Assoc. Physician, printed, Edinburgh, 1896, pp. 13-14.

The Tale of the Poor Man of Nippur, the earliest example¹⁷ of the folktale motif "The First Larrikin" best known from the *Thousand and One Nights* has often served to show that ancient Mesopotamian literature too knew the physician as a comic figure. This tale narrates how a poor man, wronged by the corrupt mayor of the city of Nippur, takes his revenge by giving the mayor three good thrashings for the one he received. He administers the second thrashing in the garb of a doctor from the city of Isin, under the pretense of tending the wounds that he himself had inflicted when he thrashed the mayor in a different disguise. Another humorous story, only recently published, *The Tale of the Illiterate Doctor from Isin*¹⁸ also pokes fun at the medical profession represented here again by a physician from Isin.

He is depicted as an illiterate who, when invited to Nippur to a banquet, cannot find his way to the house of his host be-

¹⁷ O. R. Gurnes, "The Tale of the Poor Man of Nippur and its folktale parallels," *Arabian Studies* 22 (1972): 149-58.

¹⁸ Erica Reimer, "Why Do You Kiss me?" *Proceedings of the American Philosophical Society* 130 (1986): 1-6.

cause he does not understand Sumerian, the elite language still spoken by the inhabitants. Even the old woman on the street corner who gives him directions is bilingual. She addresses him in Sumerian but has to repeat everything she said in the only language he knows, in Akkadian. The doctor's ignorance of Sumerian, the language of learning, is as ridiculous as a physician's ignorance of Latin would have been in the not-so-distant past. Through the person of the physician the story also makes fun of the city of Isin itself, as famous in Mesopotamia for its physicians and as synonymous with medicine as medieval Salerno was to become. The most famous in the ancient world were of course the Egyptian physicians, so great was their fame that their neighbors in Anatolia begged them to come and provide treatment and medication, a topic that has been amply treated by Egyptologists.¹

The two humorous tales that show that the physician was a comic figure in Babylonian literature just as he was in *Molière*—and still is—have contributed to rekindle the interest in Mesopotamian medicine. The study of Mesopotamian medicine has also benefited from the upsurge of interest in the history of ancient medicine,² and has attracted a number of Assyriologists competent to deal with the original material. They contribute to collective works on the history of medicine³ but in the main their studies have focused on the identification of the diseases and of the materia medica used in the prescriptions. This, however, is the area that is fraught with the greatest difficulties, since we are rarely able to identify the substances—plants, minerals, and other matter—that enter as ingredients in recipes, or even to give a precise translation of the symptoms

1. J. H. Brear, ed., *Ancient Egypt and Egyptian Medicine in Mediterranean, European and American Museums* (Westminster, 1979).

2. To mention a few, the studies on Hippocratic medicine resulting from the collection of Spasberg in 1977, and the books of G. E. R. Lloyd, the most recent being *The early history of medicine* (Sather Classical Lectures, vol. 52, Berkeley, Los Angeles, London: University of California Press, 1987).

3. *Lebensumspann: Lebenszeit, Lebensweg, Heilung* (H. Schipperges, J. Siedler, P. L. Landschaft, eds., *Gesamtschwerpunkt des Instituts für Historische Anthropologie*, V. vol. 1, Freiburg, Albin, 1986) or *Diseases in Antiquity: Descriptive, Diagnostic, Therapeutic, and Prognostic, of various populations* (Kim R. Brothwell and A. L. Sandison eds., Springfield, Ill.: C. C. Thomas, 1967).



FIGURE 6. Middle register of a bronze plaque, showing a patient being cured. Courtesy of the Louvre, no. 22205.

described. The conceptual advance represented by the structural approach of Dietrich Goltz¹² has remained largely without following, as have the more philosophically oriented studies of Lloyd, even though we no longer give credence to Herodotus' report on the lack of physicians¹³ or make fun of the Babylonians' "Druckapothek". Herodotus' report that the Babylonians bring their sick to the market in order to inquire of passers-by what remedies they would suggest has served as argument in the market-economy dispute more importantly than in the history of medicine, and we realize that the *Druckapothek* was a well-known pharmaceutical handbook of the seventeenth century.¹⁴

Understanding Babylonian medicine is especially seriously hampered by the character of the prescriptions, as they nowhere explain the reasons for the treatment indicated nor the property of the ingredient that recommends its use.

In this respect the medicine of the Babylonians is not different from the rest of their scientific literature which knows only two forms: the list-form (sign lists and Sumerian and Akkadian bilingual word lists and grammatical paradigms to mathematical and astronomical tables) and the procedural

¹² Dietrich Goltz, *Strukturprobleme mesopotamischer Gesellschaften* (Heidelberg: Sudhoffs Archiv, Heft 10, Wiesbaden: Franz Steiner, 1972).

¹³ Hdt. 3.1.10; cf. A. Leo, *Appienbaris, Apollon, Asklepios* (Chicago: University of Chicago Press, 1964), 296. The anecdote is repeated in Strabo XVI 1.20.

¹⁴ The *Druckapothek*, *Vergewisserung* (repeating *Druckapothek*) by Christian Frz. Bailline.

text. In medicine, the list form is used in the pharmaceutical compendia and the procedural in prescriptions. Even procedure texts do not constitute a proper handbook, however. Scientific texts in Babylonia deal with the particular, not the general; they describe procedures but not the justification, the underlying reasons, for the procedures; they are casuistic and not universalistic; they deal not with theory but with application. This holds, as has been many times stated, for Babylonian collections of laws, which hence it is no longer customary to call "law codes," for Babylonian mathematics, which deal with problems and not with proofs, for the few "procedure" texts which describe step by step how to make glass, how to dye wool purple, how to train horses and, we can now add from a recently published manual, how to prepare meat dishes.¹⁰¹

In addition to the comparison of Babylonian and Greek medicine on the epistemological and structural level as Goltz has done, the examination of the astral components of Babylonian medicine, what in antiquity was called *ratnomathematics*, is of interest for identifying the direct threads that connect the two. A guide for discovering the rationale – if one may call it that – behind the instructions to the physician found in these sources is handily provided by Greek and Latin, Classical and late, and even medieval texts. The non-Mesopotamian texts may serve as guides, inasmuch as they can provide the general background for the beliefs and practices we find in Mesopotamia; comparisons, illuminating as they may be, should not be taken as attempts to ascertain the priority of the Babylonian over the Greek or the direction of influences, if any.¹⁰²

Treatment and cure of diseases in Babylonia were the purview of two different kinds of practitioners, the *āšipu* and the *ṣaḫ*.¹⁰³ The *āšipu* was the expert who performed apotropaic rit-

¹⁰¹ Jean Bottéro, *Textes cunéiformes Mesopotamiens* (Wilmette, Lake: Libenstein, 1984).

¹⁰² For these questions a summary with previous bibliography is found in Christopher A. Faraone, "Hephaestus the Magician and Near Eastern Parallels for Magic-Witchdoctors," *Classical Journal and Hellenic Studies* 28 (1987) 257-80, especially 277ff. A revised version is found in Christopher A. Faraone, *Delusions and Ecstasies* (Oxford: Oxford University Press, 1992) 18-35, Chapter 2, "Beastly Conditions at the Gate."

¹⁰³ For literature see Edith K. Rother, "Magical Expert (= *Āšipu*) and Physician (= *Ṣaḫ*): Notes on Two Complementary Professions in Babylonian

uals, recited incantations, and executed magic manipulations; hence the term is often translated as 'conjuror,' 'exorcist,' or the like. It fell to him to examine the patient and to make a diagnosis of the illness, to prognosticate its outcome, and also often to determine its aetiology, whether the illness had a somatic cause or whether it was brought about by a god or demon, or by the infringement of a taboo. His role is evident from the handbook known, from its incipit, as *calulu and lu mase abpu iliku*, 'when the exorcist goes to the house of the sick person,' a handbook comprising forty chapters, to many of which ancient commentaries have also been preserved.⁸²

The treatment of the patient was the domain of the other practitioner, the *asû*, whose title may be appropriately translated as 'physician.' He was in charge of the preparation and administration of the medicine and of other treatments among which those we might call magical must also be counted. Several chapters of the corpus of the physician are extant, but they seem not to have been organized into a single treatise such as the exorcists were. These chapters have such titles⁸³ as 'if a man's eyes are sick' 'if a man's head is feverish,'⁸⁴ and commentaries to several of these chapters, as well as to others that are not extant, are also known.

Although elsewhere it is the exorcist who performs exorcistic and apotropaic rituals, the rituals and procedures designed to make the medical treatment more effective belong in the

Medicine, *Studies in History of Religions* (Lundborg), 11, 2, 1963, and 1963 (1964), April 22, 1963, AS 103 (Chicago, University of Chicago Press, 1963) 269-321; R. D. Biggs, *Babylonian and Assyrian Medicine*, 11 (Schippings, F. Seidler, P. U. Unschuld, eds., *Veröffentlichungen des Instituts für Historische Anthropologie*, V, vol. 1, Freiburg, Nesos, 1978) 81-111.

⁸² Edited by Rado Lohr, *Die Formeln der Exorzisten und prognostischen Texte* (Leiden, Brill, 1951); additionally portions of the treatise and commentaries have been published by Hermann Hunger, *op. cit.* vol. 1 nos. 27-42, and Eibert von Wehrer, *Spitzl*, vol. 3 nos. 87-88. A catalogue of this series is published by J. E. Finkel, *Ašad-apia-iddina, Išegil-ka-naphi*, and this series SA Gila, in A. S. Smith, *Assyrian Medical Studies*, *Memor. of Abraham Sachs* (Leiden, M. J. de Ellis P. Gerardo, eds., Philadelphia, The University Museum, 1988) 143-58.

⁸³ Titles appear as subscripts on the cuneiform tablets.

⁸⁴ E.g. BA M nos. 510-16.

⁸⁵ E.g. Hermann Hunger, *Spitzl*, vol. 1 nos. 44-45 and 48.

physicians domain. Foremost among them are those designed to ascertain that the celestial powers make the medication efficacious, to attain this goal the medicine has to be prepared under the stars' benefic influence, and administered at a propitious time.

The most commonly occurring phrase among the instructions to this effect is 'you let (the preparation) spend the night under the stars.'¹² Since the instruction refers to a medication prepared ahead of time, on the eve before it is administered to the patient, it could be taken as the normal way of expressing 'to let stand overnight,' as in fact it has been translated in the *Chicago Assyrian Dictionary*.¹³ There are indeed practical reasons for letting the preparation stand overnight: the ingredients must be steeped in the carrier—oil for salves, liquids for potions and baths—in order to be properly blended.¹⁴ The mixture is sometimes put in the oven to steep or simmer overnight, and removed in the morning and cooled before use. Nevertheless, the practical reason alone does not explain or justify the procedure: exposition of the medication "to the stars" is necessary to obtain astral irradiation.

The phrase is first encountered in medical texts written in Akkadian at the little capital Hattusa (present-day Boghazkoy) in Anatolia where they were excavated in the early years of this century; they can be dated to c. the thirteenth century B.C. As these texts themselves are no doubt copies of, or modeled on originals written in Babylonia, they take us back to the middle of the second millennium and possibly even earlier, to the Old Babylonian period from which few medical texts are extant. The Boghazkoy material, in structure, content, and terminology, resembles the large corpus of medical texts from the first millennium more than it does the few known Old Babylonian and Middle Babylonian exemplars; since much of the intellectual as well as political history of Babylonia is hidden in

¹² *in mēšatē lilligē* 'literally, you have-ent-spend the night on the star,' the singular *lilligē* (*lillig* 'being more frequent than the plural *lillig*'), *ML* 5.

¹³ *Subst. v. 'to let stand overnight.'*

¹⁴ *Das Hattushitische Studien zur altbabylonischen Medizin (Graßhofen-Hattush. Sudhoffs Archiv, Beiheft 20)* Wiesbaden: Franz Steiner, 1973/51 with n. 300.

¹⁵ *Das Zoladensteherbrosen-systeme-Mazeration*.

Mesopotamia. We know these texts both from the library of Tiglath-Pileser I in Assur from the eleventh or tenth centuries B.C. and from the seventh-century library of Assurbanipal at Nineveh, but their date of composition is uncertain. For example:

If a man's left temple hurts him and his left eye is swollen and tears, you crush dates, Telmun-dates, ²⁵²plant, and cedar resin in myrrh-oil, you expose it overnight to the stars, ²⁵³in the morning, without eating, ²⁵⁴you daub this eyes with it. ²⁵⁵

You dry and crush dog's tongue ²⁵⁶which, when you pulled it up, the sun (did not see). ²⁵⁷ [you mix it] into beer from the tavern-keeper, you expose it overnight to the star(s), [he drinks it] without eating [and gets well]. ²⁵⁸

You expose (the extract) overnight to the star(s), he drinks it and will vomit. ²⁵⁹

Powdered minerals are added to beer and then mixed with juniper oil, ²⁶⁰exposed to the stars, and in the morning, before the sun rises, "you anoint the patient's entire body"; ²⁶¹a sim-

²⁵² A less literal translation of the phrase "you let it spend the night under the stars" (the phrase is comparable to Greek *astronomein*, that is, to expose to stellar radiation) Amichia's use of *delatio*, *Herbarius* (note 142 above) 192 with reference to a 140 (2 pp. 127-16) (indicating via unprovenim) 128-141 129-150 (proving via 140-150) (indicating via unprovenim) 131-12 (descriptio herbas planetarum) ex codice Ups. and Mus. (Stange Acad. Scient. Petropoli-tanum). The German verb *bewahren* was used by H. Ritter in his translation of the Arabic *Picatrix* as a single-word equivalent to "dem astralischen Einflusse aussetzen".

²⁵³ The injunction could refer not only to the patient's fasting, as it has usually been taken and as it also seems to mean here, either because it was recognized that ingesting medicine on an empty stomach makes it more effective or because fasting is essential for cultic purity, but it could refer, as in other cultures, to swallowing medicine and the like without chewing it, as Pliny puts it, without the teeth touching it (*quoniam dentibus tactis nihil pro-sunt* because if the teeth are touched [the medication] is useless, Pliny, *NH* 30.15). Probably for similar reasons is the use of a reed tube (Akkadian *lak-kassa* cf. Pliny's *per os reedum*) for administering medicine recommended.

²⁵⁴ ma 11 tusbat ma šerim bahu patan 45qu. BAM 482 m 2.

²⁵⁵ A plant whose Akkadian name corresponds to *Cynoglossum*, but whose botanical identity is not known: see p. 32 and note 131.

²⁵⁶ For this precaution see Chapter II.

²⁵⁷ ma 11 tuš bat bahu patan [šittima ma'at]. BAM 396 m 7-9.

²⁵⁸ ma 11 tuš bat šittima carra. BAM 378 m 1 and 2.

²⁵⁹ Qiman šurment.

²⁶⁰ kala zumušu tapššas. AMT 90.1 m 6.

aspect of the goddess also explains the fact that votive dogs have been found in great numbers in the Gula temples, including the recently excavated temple in Nippur. We should also note that the goat is the animal of Hecate – and of her manifestation as Selene – too.¹²⁶

As most specific instructions mention the constellation of Gula, the Goat, or rather 'she-goat',¹²⁷ it should be evident that the aim of the procedure is irradiation by the star of the goddess of healing. The star of Gula, especially the 0.1 magnitude Vega in the constellation Lyra – the fourth brightest of all the stars, is particularly prominent in the summer sky, but can be seen at varying times any night of the year.¹²⁸ Other prescriptions state: "These 24 herbs and aromatics you arrange before the Goat star, you moisten them with beer, in the morning you boil it";¹²⁹ "at night you let it stand overnight before the Goat star, in [the morning] you boil it";¹³⁰ and so on.¹³¹

Any doubts about this identification should be dispelled by the explicit instruction: "at night you let it stand overnight before the Goat star, (you draw a magic circle around it with flour, you cense it) and you invoke the names of Gula and of Belet-ili."¹³² The Goat star of one prescription is further identified as the "cattle-peri" of Gula.¹³³ Instead of Goat star, some texts simply say "before the goddess Gula."¹³⁴

¹²⁶ Wilhelm Hilde Boscher, *Ufer Selene und Terminus: Studien zur griechisch-lateinischen Mythologie und Kultur* (Leipzig: Teubner, 1900), 17, and also three images of a papyrus-bundle, customarily interchange the moon goddesses Hecate and Selene, for example PGM IV 2525, 2511, and 2821.

¹²⁷ AF 549a: 609.

¹²⁸ To quote H. A. Rey, *The Stars* (New York: New York: Dover Publications, 1962, twelfth printing 1970), 6.

¹²⁹ ... ana lu4 MU 1 1 7 bu4-ri-ia bu4-ri-ia lu4-ri-ia ... ina se4ri lu4-ri-ia PGM 579 iv 19.

¹³⁰ ... ina MU ana lu4 MU 1 1 7 lu4-ri-ia bu4-ri-ia lu4-ri-ia PGM 579 iv 59.

¹³¹ ... ina MU ana lu4-ri-ia ... ina lu4 MU 1 1 7 lu4-ri-ia PGM 574 i 29, variant from 575 iv 19, and, with parallel MU 1 MU the stars of the night, PGM 139 i 34, PGM 578 i 40.

¹³² ... ina mu4 ana lu4 MU 1 1 7 lu4-ri-ia ... Gu4 Gula u4 se4-ri lu4 MU lu4-ri-ia PGM 49 17n, also ibid. i 37n, 50 n 24n, 54 10.

¹³³ ... ana lu4 MU 1 1 7 lu4-ri-ia lu4-ri-ia PGM 579 iv 38n.

¹³⁴ ... ana lu4 lu4-ri-ia before Gula PGM 575 iii 54, et. in a healing ritual, "you sweep the dust lu4 lu4-ri-ia before Gula" KAR 73b.



FIGURE 7. Seal representing Gula with her dog. Courtesy of the British Museum, no. B9844.



FIGURE 8. Gula and her dog represented on a boundary stone. Courtesy of the Louvre, no. Sb 22.

A further proof for the identity of the Goat star and the goddess of healing is the recipe: "You take equal amounts of various herbs, chop them, sprinkle them with pure juniper juice, and place the mixture before Gula" while a duplicate to this text says "place it before the Goat star."²² Even the veterinarian exposed the tonic he prepared for horses to the Goat star: "take one-third liter each from the 23 plants enumerated above, . . . leave them overnight exposed to the Goat star, in the morning boil them, . . . this is a tonic for horses."²³

The same sources from Anatolia that provided the earliest references to the practice of nocturnal exposition are also those that give the reasons for it. They are, however, written in the Hittite language, and thus were less accessible to Assyriologists. One text, from about the thirteenth century, directs the exorcist, "Take it (the substance to be used) up to the roof, and recite as follows: 'From on high in the sky may the thousand stars *mean* it, and may the Moon god *mean* it.' And it remains under the stars."²⁴

The Hittite verb used for the celestial irradiation, *mekkisk-*, can be more easily translated into German, with the verb 'besprechen,' as the editor of the text, Kromasser, had done. For lack of a similarly appropriate term in English, I have applied the verb 'to mean,' reminiscent of 'manifestation,' to express influence through irradiation. The Hittite text emphasizes the power the stars exercise and the way in which this power is manifested, while the Akkadian texts highlight the practitioner's act of the exposition. The result expected in both cultures, however, is not in doubt: the stars will make the potion or salve potent and efficacious.

It was not always Vega, the Goat, that was invoked to irradiate the medication, possibly because its position in the sky was not favorable or the day not propitious for praying to the

²² *malimalis tušmisi UR.BI takassim mē buršā ellūti tasallah ina pan* 'Gula (variant, MUL UZ) tokas, RAA 168:35; dupl. SPT 97:11-11.

²³ RAA 159 v. 41-46. Herbs are exposed to the Goat star also in RAA 90:7, 561:5, 579 v. 51, ix. 29, and *Emesken* contexts RAA 39 rev. 11.

²⁴ KUB 7 no. 1 v. 20-24 (cf. see Kromasser, *Die Sprache* 7 (1965) 149 (transcription) and 151 (translation), Cr. 97:40-270). 'In der Nacht haben es die tausend Sterne und der Mondgott besprochen.' See also Ernst Tenner, ZA 38 (1929) 187, ad lines 21f.

goddess Gula. Corresponding in prominence to Vega in Lyra, the brightest summer star, the brightest winter constellation is Orion, known as the True Shepherd of Anu according to its Sumerian name, Sipartanna.²²⁸ While Orion too was worshipped as a deity in Mesopotamia,²²⁹ few medical texts invoke it. A fragmentary text²³⁰ that preserves a ritual, including libations, before the constellation probably belongs in the medical corpus, judging by the few preserved ends of lines: "you salve him,"²³¹ the name of the herb "it cures twenty,"²³² and the injunction "without eating" (line 8).²³³ An equally fragmentary text invokes Orion against vertigo.²³⁴

More rarely, medical texts contain appeals to the Yoke star, a constellation roughly equivalent to Bootes (see Chapter I), the Scorpion, and Centaurus. But the constellation most frequently beseeched to irradiate the substance exposed to it is Ursa Major, our Big Dipper, which occurs frequently in the Greek magical papyri too under its more common Greek name, Bear (ἄρκτος 'she-bear'). The Babylonians called it Wagon,²³⁵ after the shape of the seven most conspicuous stars, a name that is also used by various Eurasian peoples, in English (Charles')

²²⁸ The constellations Akkadon natne, Šidaddatu or Šidallu, is a word of unknown meaning and etymology.

²²⁹ For Sipartanna's role in Babylonian ritual see Chapter VIII. He was invoked in the Hellenistic magical papyri as Σοὶν Όριον (PGM I 29-36).

²³⁰ JAM 302.

²³¹ ŠES in line 5.

²³² Urd 20: *uher-ri-ka* line 6.

1	Sipar-tan-na UR ŠAR	[before] Orion you sweep the road
2	x GAR- <i>an-ka's</i> ŠAR	you set him . you libate first
	Bilaga	quality beer
3	12. BI ZA 2 x šu-ri šu	a green frog
4	x KI <i>esset-tor</i> 125 ŠID	
5	ŠES- <i>su</i>	you salve him
6	x 120	it cures twenty herb
7	x-hat (possibly) [mésamu	you squeeze their juices
	[islahhuti]	
8	ba-lo pa-tan	[without] eating
9	x	

²³³ ŠES-NIŠ-ŠEŠ-*zi* AN XA | | muk-ša e-lu | | E-ša-ta ina šamē nap-[ha-ta | šidānu! | mahra-ka AN | | J.A. 25 a 20-24 (end of obverse), the duplicates to this text (see p. 136) omit the prayer to Urash.

²³⁴ Sumerian NAK LUDGA = Akkadian *Frage*.

Wain, in Latin *plaustrum*, *carrus*, in French *chariot* (*le chariot du roi David*), in Italian *Carro*, in German *Wagen*, in South Slavic (*Velika* 'Big') *Kola*, in Hungarian *Szeker* (*Göncös-szeker*), etc. Both Bear and Wagon are attested in Homer: "the Great Bear that mankind also calls the Wagon: she wheels on her axis always fixed, watching Orion, and she alone is denied a plunge in the Ocean's baths"¹²⁰. Only in Babylonia, however, do we have a more detailed description of this constellation as well as the enumeration of its parts: the yoke, the pole, and the side-pieces, which in these prayers are equated with divine beings.¹²¹

Since Ursa Major is a circumpolar constellation, and thus never sets, "she alone is denied a plunge in the Ocean's baths"—or, as the Babylonians put it, "it stands there all year"¹²²; it could be invoked at any season of the year so that practical considerations could have played a role in its choice. We should also note that the Akkadian word for Wagon, *crappu*, is of feminine gender. Thereby the Wagon constellation may be identified with the goddess Ishtar, and with her heavenly manifestation, the planet Venus. The identification is attested not only in the ancient star lists and commentaries according to which "The

¹²⁰ Ἀρκτοὺς θ', ἧς καὶ Ἀρούς τινες καλεῖσθαι,
ἥ τ' ἀρκτὺς ἀσπερ τὸν σφαῖρον. (Homer, *Il.* 13.46)
σφαῖρον δ' ἀρκτοὺς καὶ Ἀρούς τινες καλεῖσθαι.

Il. XVIII 487-89 and *Od.* V 273. ¹²¹ Translation from *Homer: The Iliad*, translated by Robert Eaglestone, Loeb Viking Penguin, 1990. The passage is cited, among others, by Festugière, *La Religion d'Homer: Introduction* (1950), vol. I, pp. 182f. and Eric P. Hamp, "The Principal Indo-European Constellations," *Proceedings of the 19th International Congress of Linguists*, Luigi Heldmann, ed. (Bologna: il Mulino, 1976), 1239. Most recently, the fact that the Greek name *arktos* 'chariot' was borrowed from Babylonia has been pointed out by Duchesne-Guillemy, *CRAI* 1980, p. 237.

¹²² *STT* 23.61-64 and 71-73; see *IM* 5.19, 1960.53, a duplicate to this text. *LEI* 7.118.8-10 and 17-20, writes the name of the constellation as MUL.MAR.GU.DA.AN.SA, which elsewhere designates Ursa Minor; see the references collected by Wayne Horowitz, "The Akkadian Name for Ursa Minor," *J.A.S.* 79 (1980) 242. Another prayer to Ursa Minor, addressing her as MUL.MAR.GU.DA.AN.SA, *LS* MAR.GU.DA, is published in Egbert von Winter, *Spl* 17, vol. 4 no. 129a, 214, and an unpublished text, BM 53841 - 49066, signaled by W. G. Lambert to von Winter, is mentioned on p. 39 id. loc.

¹²³ *BP* 2 Text III 28. Kal Sattu 17227.

Wagon is Venus in the East²²⁹ but is also evident from the inclusion of omens from the Wagon among celestial omens derived from phenomena of Venus observed.²³⁰ In her manifestation as the year-round visible, circumpolar constellation Ursa Major, the Big Dipper, Bar can exert her influence even when her planet, Venus, is invisible.²³¹

Other stars remain nameless. The chapter "if a man's head is feverish" of the medical compendium includes recipes to stop loss or thinning of hair, and the treatment is accompanied by the recitation of charms. The last of a series of six such charms (labeled "incantation") is addressed to an unnamed star, identified only as the "first" star, and is accompanied by offerings consisting not only of the usual foodstuffs (dates, flour, a sweet confection, ghee, herbs and spices, etc.) but also of a lamb. The address to the star is as follows:

You, star, who illuminates [] the midst of heaven, who surveys
all four regions,
I, so-and-so, son of so-and-so,²³² prostrate myself before you this
night, decide my case, give me a verdict,
let these herbs wipe away the evil that affects me.²³³

Just as a magic circle around the herb itself before it was dug up was indicated, a magic circle around the medicinal preparation was supposed to enhance the effect expected from the nocturnal exposition. Thus, a recipe directs: "you place (the three herbs steeped in beer) before the Gsat star (variant: the stars of the night), you draw a circle around it,²³⁴ in the morning [] you strain it, he drinks it without eating."²³⁵

²²⁹ [MUL] MARGIDIM, MUL Dabhar ina 11-11-11A, JBM 1561-13; see Weidner, *Handbuch* 118, and the unpublished tablet BM 37394.

²³⁰ See [MUL] 7; note also that a *scholion* gives Venus as explanation to the Gsat star, MUL 62. (Detour, Hermann Hunger, *Astronomical Reports to Assyrian Kings*, SAA n. 1042 [no. 175 z. 7].)

²³¹ For rituals performed before Ursa Major, see Chapter V.

²³² Here the name and patronym of the patient are to be supplied.

²³³ *aka kalakabi munammi x x x qereb samas-ha e kibrati*
anaku anasaku war annanna nana musarone maharka kamsaku dim din
purussa'a purus
Samma anaku lipisu lumu.

BM 37394, 52-54.

²³⁴ Literally, "surround it with a drawing."

²³⁵ *acampar* MUL 1, 27a3akkur usuta talamm ina kem [x x] nu tašahhal

A medication prepared with herbs gathered in the proper fashion, and exposed to irradiation by the stars often is also administered at an astrologically propitious moment. Favorable days for commencing some activity or enterprise are listed in the hemerologies, but administering medicine is not singled out, apart from the injunction "the physician must not treat a patient"²² which is mentioned among forbidden activities on certain unpropitious days. The choice of particular times of the month or year and the role of constellations and planets is significant not only in medicine but also in various domains of magic; it will be given an appropriate place in Chapter V.

Stars can be efficacious in healing illness since they may have been its cause. Ptolemaic texts speak of illness "drizzling down from the udders of heaven"²³ or "raining down from the stars"; charms for protection against some illness may state that it "has come down from the stars in the sky";²⁴ dew coming from stars may be evil as well as beneficial, as the phrases "evil dew of the stars" and the "pure dew of the stars"²⁵ show. More specific is the attribution to the planets Jupiter and Mars of spleen and kidney ailments. We have here the first occurrence of *melothesia*²⁶ and the only known Babylonian ex-

balu patan isatu, BAM 578 r. 36-37, variant from BAM 159 r. 74, parallel also BAM 90 r. 11. For "without eating" see note 397.

²² *asu ana marse qassu la silbil* BAM 170 r. 12a and *passim*.

²³ [C 5.9 (497)] 8B. (The cuneiform text is now published as 3038-11 no. K1, see Oppenheim, "Man and Nature in Mesopotamian Civilization," *JNH* 15 p. 660, while other texts speak of illness springing up from the bowels of the earth [e.g. U 52], see E. Reiner, *Lost Illusions in Egypt: Nine Mantine Ropes Cut: Texts from Babylon and Assur*, Michigan Studies in the Humanities, 5 (Ann Arbor, 1965) 115.

²⁴ The *malikata* disease, *an.ME.MES lamtanu-ma* (*malikata* ME.MES *simtanu*), descended from the stars of the sky, at *indud* descended from the stars of the sky, BAM 590 v. 7. For the disease *malikata* etc., true name, see E. Reiner, "Nocturnal Talk, in *Engendering Words: Studies in Ancient Near Eastern Literature* (Haupt in *Wörterbuch der Assyrischen Sprache*), Harvard Semitic Studies, V (Atlanta: Scholars Press, 1969) 424 n. 15, while its common name is *lu*—see CAD L, xv.

²⁵ *malikata* (*malikata* *malikata* and *malikata* *malikata*), Hermann Hunger, *SPU* vol. I no. 48 and duplicated Walter Farber, *Semite: Antiquität, Schrift, Mesopotamische Babyl-Beschreibung und Schrift* (Wien: Mayer & Co., 1969) 63.

²⁶ A. Bouche-Leclercq, *L'Astrologie égyptienne* (Paris, 1894; reprinted Aalen Scientia, 1979) 120ff.



FIGURE 9. Clay models of sheep livers inscribed with liver omens. Courtesy of the Louvre, no. AO 19829.

ample. The commentary to a medical text in which it occurs does not make this connection clear. It cites the entry from a medical text and then comments upon it. The first entry is "If a man's spleen hurts him: this is followed by the phrase that normally introduces *scholia* "as they say" (or "as it-seil, the commentary says") and finally the *scholion* or explanation itself "in the spleen = Jupiter", a lexical equation, SA.GIG = *tu-dumu* 'spleen,' ends the quote. The next entry is similarly structured: "If a man's kidney hurts him, (the disease comes from the god) Nergal, as they say. The kidney-star is Mars!"²¹ In this last *scholion* the *tertium comparationis*, namely "Nergal is Mars" has been omitted. It is well known, from Ptolemy and others, that Mars "governs" the kidneys; Jupiter "governs" the liver and the stomach.²²

²¹ *Summa ardui tulimā dukū* = *šar-gū-ra SA SA.GIG* = *SA.GIG* *MA.GAR* *šaydi* = *tu-dumu* = *summa ardui tulimā dukū* ('Nergal SA igbū MA.GAR' = *šar-gū-ra* (rev. 1973) 196, Text 5; see E. Reimer, *Neubabylonische* [Neubabylonische] fragmentary commentary to a medical text comments on the ingredient "blood from a bull's kidney," with the equation *MA.GAR* = *karēbi* 'kidney-star' = kidney. Hermann Hunger, *SpU*, vol. 1 no. 54.1).

²² *tu-dumu* p. 216.4 = *tu-dumu* p. 24.9-25 (the *apton* *stellatum* *heros*) attributes to Mars the shoulders *tu-dumu* and kidneys; to Jupiter *šaydi* *karēbi* et. Demophilus ap. Porphyry, p. 196. Ichn-Brahe, in a lecture from 1574 (*De siderum constitutionibus* p. 100), 1.1. E. Dreyer, ed., vol. 1 [1913] 152 introduced by Hell-Heinrich Goudel p. 55, assigns the heart, the source of heat, to the sun, the brain to the Moon, the spleen to Saturn, the liver to Jupiter, the gallbladder to Mars, the kidneys to Venus, the lungs to Mercury. For planetary melothesia see Alessandro Olivieri, *Melothesia planetaria Graeca* (Napoli: Accademia di Archeologia Lettere e B. Arti, 1934).

CHAPTER IV

*Divination*²⁵³

This gate of the stars and slaughter lamb
(Sumerian letter)

Mesopotamian man sought to learn what the future holds from every conceivable event and manifestation of the world around him. Gods gave signs through such happenings, and these signs, the gods' warnings, could be read, and the future that they predicted could be averted through penitence, prayer, and appropriate apotropaic rituals, just as even the stern God of the Old Testament could be swayed by the Ninevites' repentance, as the Book of Jonah teaches.

Some signs came unprovoked, through fortuitous happenings in house and field and in the sky; others were specifically requested as answers to questions put to the gods through a variety of media.²⁵⁴

The fortuitous occurrence and a subsequent good fortune or misfortune were linked in the mind of Mesopotamian man, as they were in many early cultures and still are in primitive societies, not so much as cause and effect, but as signals or forewarnings and events. Such linked pairs, consisting of a protasis (if-clause) and an apodosis (forecast), a pair called by the technical term "omen," were collected in lists, and these lists even-

²⁵³ For literature see A. L. Oppenheim, "The Arts of the Diviner," in *Ancient Mesopotamia* (note 179 above) 268-27; idem, "Man and Nature in Mesopotamian Civilization," *DSB* 13 pp. 634-66; Jean Bottéro, "Symptômes, Signes, Certitudes," in *De l'écriture à l'écrit* (J.-P. Vernant, ed.) 70-197. A concise summary of ancient divination is given in Gary Lusk, *Arana Mundi* (Baltimore and London: Johns Hopkins University Press, 1985) 229-31 and 251-57.

²⁵⁴ In the Classical world these two types of omens are called *omena obliuia* ("freely" brought about omens) and *omena impetrata* (asked for omens); see Bouche-Latréry, *Histoire de la divination dans l'antiquité* (Paris: Lesouls, 1879-82), vol. 4 p. 184.

tually developed into the large compendia that we call omen series. Usually, topically connected lists in the cuneiform writing system are acrographic as well, that is, each item – each line – begins with the same cuneiform sign or group of signs, a feature that articulates the ancient syllabaries and vocabularies, as we saw earlier. Lists can therefore often be expanded indefinitely through the addition of items that repeat the protasis with further specifications;²⁵⁵ the forecasts connected with these additional omens are accordingly modified. For example, a phenomenon occurring on the right side of the liver was paired with the same one occurring on the left, with the opposite forecast. If one color occurred in the omen, similar omens with other colors – five in all: white, black, red, green, and variegated, always in this sequence – could be added. Numbers were increased from one or two to three and more, even if the increase resulted in an absurdity, as for example in the enumeration of multiple births up to eight or nine.²⁵⁶ “[T]he original practical purpose of such collections of omens was soon expanded – and even superseded, by theoretical aspirations. Instead of expressing general principles of interpretation in abstract terms, the scribes strove to cover the range of possibilities by means of systematic permutations in pairs (left-right, above-below, and so on) or in long rows.”²⁵⁷ The Babylonian omen series kept growing in this way.

Omens could be provoked by observing the shapes taken by oil poured on water, a procedure called *lecanomaney* (from Greek *lekane* ‘basin’), and by observing the configurations of the smoke rising from an incense-burner, *libanomaney* (from Greek *libanos* ‘frankincense’). These techniques were in vogue in the Old Babylonian period, in the first half of the second millennium B.C., but die out with it.²⁵⁸ But the most ancient and the most tenacious in surviving of all the Babylonian divinatory

²⁵⁵ Oppenheim, *OSB* 15 p. 642 with note 96.

²⁵⁶ Frl. Leachy, *The Babylonian Omen Series: Summa ulbu*, *Texts from Cuneiform Sources* 3 (Göttingen: Augustin, 1969) tablet I 13.

²⁵⁷ Oppenheim, *Ancient Mesopotamia* note 129 above n. 244.

²⁵⁸ A few later excerpts of *lecanomaney* and *libanomaney* are extant but their existence, as a written tradition, need not indicate that the techniques were still in use, even though Nougayrol, *Or* NS 32 (1963) 341 n. 3, argues in favor of their survival.

techniques is divination from the entrails (*exta*) of the lamb, extispicy, a term more general, since it includes divination from the gall bladder, the spleen, and the lungs, than the more commonly known term, hepatoscopy, 'inspection of the liver.' As is well known, hepatoscopy was practiced in Italy by the Etruscans, so that the Romans called this divination the "Etruscan discipline"; just as the hepatoscopy of the Etruscans ultimately goes back to Mesopotamian origins,²⁰ so another technique practiced by the Etruscans, divination from thunder, bron-toscopy, also had its antecedents, no doubt, in Babylonia where the meteorological omens formed part of the larger collection of celestial omens.²¹ Hepatoscopy remained the main means of consulting the will of the gods, even as divination from celestial bodies was gaining in importance, as late as in the reign of King Nabonidus the portents of celestial omens had to be tested, as we shall see, by submitting queries about them to the haruspex.

The diviner par excellence was the haruspex, whose name, *harû*, literally means 'observer, seer.' The term was also applied to those diviners who observed the configurations of the oil or smoke, while the scholars who made astronomical observations and recorded the forecasts derived from celestial phenomena were called *tupšar Enma Ana Lûlil*, a term meaning "scribe of (the celestial omen series entitled) 'When Ana, Lûlil . . .'" and best translated, albeit freely, "expert in celestial matters." An abundant correspondence from the Neo-Assyrian empire attests the importance at the royal court of the diviners and the astronomers who apprised the king of the portents, and the exorcists who were expert in averting ill-boding forecasts by their rituals.²² The astronomers regularly conveyed to the king such routine reports as the monthly sighting of the new

²⁰ Jean Nougayrol, "Les rapports des haruspices étrusque et assyro-babylonienne, et le foie d'angle de *Fa. 120. Viterbo* (Villa Giulia 3796)," *CRAI* 1955, pp. 509-19.

²¹ Bouche-Leclercq, *Histoire de la divination dans l'antiquité* (Paris, Leroux, 1878-82) vol. 4, pp. 32ff.

²² This correspondence was recently reedited and commented by Sime Parpola, LBS, and revised in his *Letters from Assyrian and Babylonian Scholars*, SAA 10 (1993). See also Oppenheim, "Divination and Celestial Observation in the Last Assyrian Empire," *Constantia* 14 (1968) 97-135.

moon and the date of the opposition of sun and moon as well as special reports on various predictable and predicted celestial and meteorological phenomena, such as conjunctions, occultations, and rain and thunder.²⁷ More than a thousand years earlier, in Mari, the correspondents reported on such extraordinary events as torrential rains and thunder.²⁸

Of the diviner we know from as early as the Old Babylonian period that he accompanied the king on his campaigns;²⁹ most diviners were attached to the court, though at least some villages had a resident *biri*, as is shown by the complaint of an Old Babylonian correspondent that there are not enough lambs in the village even to provide the *biri*.³⁰ Nevertheless, some diviners had to live by their wits. This is shown by the apotropaic ritual aiming at 'achieving renown for the diviner'.³¹ Such renown, based on correct predictions, would attract the customers that the haruspex needed for his livelihood since he belonged to the professionals – the diviner and the physician – who made their living from private clients, as did also the innkeeper and baker with whom the diviner and the physician are joined in another ritual to ensure brisk business.³²

²⁷ These are collected by Hermann Hunger, *Astrological Reports to Assyrian Kings* (SAA 5) (1982).

²⁸ ARM 1 23.90 and 192; also ARM 1 13.103, ARM 14.7, cited *passim*; ARM 1 23 p. 100, sub a.

²⁹ For example, 'The diviner, Ištar-nasir, servant of my lord, will lead the troops of my land, and a Babylonian diviner will go with the Babylonian troops.' ARM 2 22.24r (edited) 47.9 p. 124. For the role of the diviner in Mari, see J. M. Durand, *Archives épistolaires de Mari* 1.1 (= ARM 26) Paris: Editions Recherche sur les Civilisations, 1980: 5–80.

³⁰ There are ten ewes in the village; they are hardly sufficient to provide lambs for the diviner. 34.1.48.127 (edited) 47.9 p. 121.

³¹ Small: *bakru, amaru, as-sam-ta-bu-le-ke* 'to find praise for the diviner and to obtain from him literally "a good name"'. BRL 65: 11 r. in 15 and no. 19: 15.

Ritual to be performed: 'in order that brisk trade not bypass the house of a innkeeper, or of a diviner, or of a physician, or of an exorcist, or of a baker.' 7.1.52.19 (no. 19) 364–84. See Oppenheim, *Ancient Mesopotamia* (note 17) above, 203. For considering the primary reason for this ritual the purification of the tavern in order to return business to it see Stefan Maul, 'Der Kneipensack als Ritualgefäß', *Archiv für Orientforschung* 36 (1980) 1–10; also *Recherches sur les Civilisations*, Actes de la XXXIII^e Rencontre Assyriologique Internationale (Paris, 8–10 juillet 1981), D. Charpin & J. Joannes eds. (Paris, Editions Recherche sur les Civilisations, 1982) 385–96, esp. p.

The standing of the haruspex at the Neo-Assyrian court and the respect accorded to his craft is evident from a "letter of recommendation" addressed to the king.³⁹⁵ The writer of the letter recommends various scholars to the king as well-trained, and justifies his opinion by characterizing even the expert in the celestial omen series with the words *harūtu ilē* 'he is expert in *harūtu*', although it is possible that the word *harūtu* is here used as a general term for 'divination' and not solely for 'hepatoscopy'.³⁹⁶

Before proceeding to the examination of the omens, parts of the lamb sacrificed for this purpose, the diviner appealed to his patron deities. These were, in the first millennium at least, the sun god, Šamaš, and the storm god, Adad; the haruspex invoked them at the beginning of his query as 'O Šamaš, lord of judgment, O Adad, lord of divination'.³⁹⁷ In the earlier, Old Babylonian, period prayers of the diviner for a successful extispicy are similarly addressed to both deities,³⁹⁸ but also to Šamaš alone. The appeal to Šamaš is easily understood since the Sun, Šamaš, sees everything from above: the verb used is *harū* 'to see'.³⁹⁹ More difficult to explain is the statement in these prayers that he also "inscribes the omens in the entrails of the

³⁹⁵ Note that the Lano Picatrix speaks of *imago ad faciendum ut plures luctetur* ... *et videlicet [hominum] ymaginem habentem] multisiter trahere homines ad illum locum*. Picatrix I, 50, Pargues, p. 217.

³⁹⁶ Cf. I 54-57, edited by Hermann Hunger, *Empfehlungen an den König*, AOS 67 (1967) 157-66, now edited by Simo Parpola, *Letters from Assyrian and Babylonian Scholars*, SAA 10 no. 160.

³⁹⁷ On the relationship of the various experts at the Assyrian court, see Simo Parpola, 'Mesopotamian Astrology and Astronomy as Domains of the Mesopotamian Wisdom', in *The Rise and Development of the Cultures of Mesopotamians*, Hannes D. Guter, ed., *Grazier Morgenländische Studien* 3 (Graz, 1997).

³⁹⁸ Šamaš bel dnu Adad bel bnu: see Werner Mayer, *Untersuchungen zur Formensprache der Keilschriftigen Lebensbeschreibungen*, *Studia Pohl Series Minor* 5 (Rome: Biblical Institute Press, 1970) 423 sub [2].

³⁹⁹ For example AOS 11-22, edited by Coetzee, AOS 22 (1964) 25-29, also AOS 7072, see Neugayrel, *R.A.* 18 (1941) 87 (copy only), and see for these prayers van Steir, *The Rituals of the Diviner* (Malibu: Undena, 1963) 44ff.

⁴⁰⁰ The epithet 'Diviner-Seeer of the land', Akkadian *harū šummi* (written *harū šu šummi*), cited Werner Mayer, *Untersuchungen* in 270 above 411 sub 10 (after the edition by Caplice, cf. NS 76 (1967) 9ff.) is based on the single source LKA 1279, and its reading and interpretation are uncertain.

lamb," an often quoted phrase whose exact significance still eludes us, and which may have its origin in a mythological tale that has been lost.⁷⁰

The role of Adad, the storm god, as patron of the haruspex is not as clear as that of the sun god Šamaš, even though both are invoked in the standard first-millennium prayer of the haruspex. There is, however, another tradition according to which it is not these two who stand by the haruspex to ensure correct and reliable omens. Rather, it is to the stars and constellations who alone are present during his lonely vigil before he examines the liver at dawn that the diviner addresses his prayer for a successful extispicy. This is the Prayer to the Gods of the Night we saw.

No other text is as explicit as this prayer about soliciting the influence of the stars to secure a favorable outcome of the divination. Rare in Mesopotamia is also the lyricism of this poetic text, with its setting of the still night. All are asleep, even the great gods, alone are present the diviner preparing himself for the act of sacrifice and divination, and the gods of the night, the stars.

Two slightly divergent versions of this prayer have been preserved from the Old Babylonian period, that is, the eighteenth or seventeenth century B.C.; in one of them ten constellations are invoked by name: "Fire god (possibly Sirius), Erra (the god of plague, possibly referring to Mars), Bow, Yoke, Orion, Dragon, Wagon, Goat, Bison, Hydra",⁷¹ in the other version, omitting the Yoke and Hydra but adding the Pleiades, nine only.⁷² Most of them are zodiacal constellations; as in other ancient catarctic magic, few non-zodiacal constellations, such as Ursa Major and Minor, Sirius, Orion, the Pleiades, and Pegasus, are mentioned.⁷³

⁷⁰ The reference to C. J. Gadd, *Myths of Divine Rule in the Ancient East* (note 24 above) 37 n. 4, adduced by Neugebauer, *JRA* 1955 p. 510 n. 5 in this context does not clarify this image.

⁷¹ Garra, iwr, ʾšlbtu, Erra, Qašum, Nīrum, Šadidarum, Mušhušum, Iniqum, Erzum, Kīširikkum, Bašum, Dossin, BA 32 (1935) 180 (= ZA 43 [1936] 165).

⁷² Ibid. 180. AC 16589. For these two texts see also C. J. Walker, "The Myth of Garra and Plague," *Archivum Studia* 35 (1953) 146.

⁷³ "Die ausserzodiacalen Gestirne und Einzelsterne kommen als Heilgötter seltener in Frage; ebenso ist in der Astronomie und in der Zukunfts-

The prayer, along with its description of the night, reappears about one thousand years later, in the library of Assurbanipal in Nineveh. In the late version the constellations addressed are much the same as those of the Old Babylonian period:

Enter, gods of the night, great stars
Yoke, Orion, Sulphar, [break],
Wagon, Ferry, Centaurus, Field.
Enter, gods of the night, goddesses of the night
Stars of the south and the north, of the east and the west
Enter, Ninsinna, Great Lady, and the innumerable neighboring
stars.

Perhaps even as late as the seventh century B.C. the prayer served a practical purpose, and the diviner recited it before he examined the entrails of the lamb.¹⁷ Still, we should not discard the possibility that the text survived not only due to its practical usefulness but in some measure also to its poetic merit, as Oppenheim has suggested. To its lyricism our own sensibility responds, even though in the later and more elaborate prayer the nocturnal setting has become a topos and lost the direct personal, emotional tone, a feature that seems to have been censured by first-millennium taste.

The prayer exists also in a version midway in date between the two, from c. 1200 B.C., found in the capital of the Hittite empire (today Boghazkoy). It is embedded in a Hittite ritual, but written in the Akkadian language albeit in an orthography that shows it was written by a Hittite scribe. It has been known

deutenden Sternreligion ihre Bedeutung wesentlich geringer als die der Planeten- und Tierkreisbilder. Aber trotzdem kann man auch ihre Bilder und Kräfte sich auf verschiedene Weise nutzen, denn ihre Einflüsse und ihre Schicksalsbeeinflüsse werden durch mehr oder weniger anstößige, die Abhandlungen immer wieder auf den verschiedensten Gebieten angelegt. Münzen, Gemmen, Ringsteine u. a. m. Es wissen, dass auch der Grosse und kleine Kar, Sirius, Orion, die Pleiaden, Pegasus und andere Gestirngötter in Altertum, Mittelalter und Neuzeit in prognostischer oder therapeutischer Absicht benutzt worden sind. W. Gandel, *Religionsgeschichtliche Untersuchungen aus lateinischen Astrologenhandschriften* (Mémoires, *Travaux et Comptes Rendus de l'Institut de Philologie et d'Histoire Orientales et Slaves*, vol. 4 (Brussels, 1936), vol. 1, p. 246.

¹⁷ For an edition of the first-millennium text and the literary appreciation of the images, see Oppenheim, "A New Prayer to the 'Gods of the Night'." *Anaetha Biblia* 12 (1956) 282ff.

since its publication by A. Jeremias in 1909.⁷⁷ It ends with the prayer to the gods of the night, and includes an enumeration of seventeen stars and constellations.⁷⁸

The prayer to the "gods of the night" is addressed to the nocturnal stars and constellations, after the sun, the moon, and the evening star Venus have set: "The gods and goddesses of the country - Šamaš, Sin, Adad and Istar - have gone home to heaven to sleep, they will not give decisions or verdicts (tonight)."⁷⁹

The setting of another Old Babylonian prayer of the haruspex⁸⁰ is also right. It appeals to the planet Venus alone, as the stellar deity Ninsinanna, addressing it as a male deity, that is, in the planet's male manifestation;⁸¹ the diviner invokes the celestial power to ask that his examination find favorable signs:

O my lord Ninsinanna,
accept this offering,
be present in my offering, and place in it a portent of well-being
and life
for your servant Ur-Utu.⁸²

⁷⁷ A. Jeremias, *Das Alter der babylonischen Astronomie* (KAO 3 Leipzig, 1909) 3; see Weidner, KAO 4 (Leipzig, 1914) 37f. and *Handbuch* 60, with Addendum p. 241. The ritual in its entirety has been recently reedited by K. van der Horst, *Sin and Šamaš in Uruk and Mesopotamia: A Comparative Study* (Assen/Maastricht: Van Gorcum & Comp., 1985) 123ff. For notes and corrections see the review by Wolfram von Soden, *JNES* 34 (1987) 71. Van der Horst's text is a kind of conflation of two, only the last ten lines (nos. 39-48), not translated anew by him, represent the "gods of the night" prayer, for which see the bibliography in Werner Mayer, *Untersuchungen* (note 270 above) 128 no. 2a.

For this star list see *BPh* 2 p. 2.

⁷⁸ Oppenheim, *JNES* 12 (1956) 296.

⁷⁹ Léon de Meyer, "Deux prières d'Uruk du temps d'Ammisaduqa," in *ZIMR ŠUMM: Assyriological Studies Presented to E. R.ieu* (Leiden, Brill, 1982) 271-78.

⁸⁰ See p. n and note 14.

⁸¹ *ŠUMM* 48 be-*li* "Nin-sin-na-na
-*še*-*ke*-*še* an-na-*ni* mu-hu-[ur]
na *še*-*ke*-*še* *ur*-*ur*-*ur*
Ur-Utu *ur*-*ur*-*ur* šul-mi-ba-*ni*
na Ur-Utu *ur*-*ur*-*ur* šul-mi-ba-*ni*

ZIMR ŠUMM p. 274 lines 1-5. I have rendered the word written with the Sumerogram *ŠUMM* as offering, and *ur*-*ur*-*ur* as "portent" rather than as

gods, stand by me in (this) night, undo the evil of the absence of the ominous part that has occurred for me. I am afraid, worried, exceedingly worried. Let that evil not come close to me, not approach me, not attain me!"⁷⁶

The outcome of the inspection of the exta is conveyed in a letter to the person who requested the extispicy, or is recorded in brief, indeed laconic form on small tablets. A number of such reports, which often begin by stating the query posed to the god, have survived from the Old Babylonian period.⁷⁷ Around the middle of the second millennium, in Middle Babylonian reports on the inspection of the liver, the star Sirius is also mentioned in the phrase "let him give instructions that ditto (= they pray) to Sirius"; who the parties addressed are, the haruspex or his client, is not stated in the text.⁷⁸ While several prayers to Sirius have been preserved, on which more will be said later, none of them specifically asks the star to secure good omens in the extispicy.

It is not only the haruspex who sought the stars' benefic influence as he inspected the entrails of the lamb. At the more popular level of divination, which I have dubbed "fortune-telling,"⁷⁹ and which uses means accessible to clients who could not afford a lamb so that it could be called "divination for everybody" (*la divination-pour tous*) by Jean Bottéro,⁸⁰ appeals are made to stars, especially to Ursa Major, the Wagon of the Babylonian sky. The popularity of the Big Dipper is also attested in the Greek magical papyri which include several prayers to this constellation under its Greek name 'Bear' (Greek *ἀρκτος*).

⁷⁶ *ulu rabutu alsikunāši ma muši zizzanumma lumun [hah]tu šur ša ršaknamma puša [paš]tu a-drāku u šutaduraku lumun šānu ay itthā ay qur[ba] ay šunqi* (ay škūdanni rev 0'38-11).

⁷⁷ Albrecht Goetze, "Reports on Acts of Extispicy from Old Babylonian and Kassite Times," *JCS* 11 (1957) 89-107; Jean Vongayrol, "Rapports paléo-babyloniens d'haruspices," *JCS* 21 (1967, published 1969) 219-35; Jean-Marie Durand, "Les devins," *MES* 113 (= ARMT 26) 3-68.

⁷⁸ Ispurmaš, *ŠL* 1.333, *Š-ŠA KIMIN* (= Giuseppe) *JNES* 36.77ff-51; see Reiner, *Studies in Honor of Benno Landsberger on His Seventy-fifth Birthday April 21, 1965*, AS 16 (Chicago: University of Chicago Press, 1965) 248 n. 5; the text has been edited again by F. R. Kraus, *JCS* 37 (1985) 150.

⁷⁹ In my article, "Fortune-Telling in Mesopotamia," *JNES* 19 (1960) 23-35.

⁸⁰ In *Divination et Rationalité*, L.-F. Vernant, ed., p. 123.

Two prayers to Ursa Maior are prescribed in the instructions for "fortune-telling" to help obtain a reliable portent through a dream. The first runs:

O Wagon star, Wagon of the pure heavens!
Your yoke is Ninurta, your pole is Marduk.
Your side-pieces are the two heavenly daughters of Anu.
You rise in Assur, you turn toward Babylon.
Without you the dying man does not die and the healthy man
cannot go on his journey.
If I am to succeed on this journey I am undertaking, let them give
me something (in my dream).
If I am not to succeed on this journey I am undertaking, let them
accept something from me (in my dream).⁷²

And the second:

O Wagon star, heavenly Wagon!
Whose yoke is Ninurta, whose pole is Marduk,
Whose side-pieces are the two heavenly daughters of Anu.
She rises toward Assur, she turns toward Babylon.
Let a dream bring me a sign whether so and so, son of so and so,
will become healthy and well!⁷³

How the dream would indicate the recovery of the sick person is left unsaid in the second of the prayers to Ursa Maior. The first prayer, however, specifies what the dream content should be to indicate success or failure of the enterprise concerning which the consultation is made. The significance of giving or being given some object is detailed in the Assyrian Dream-book⁷⁴ and the stipulation of the prayer implies the existence of this Dream-book, even though the expected prediction is not affected by the nature of the object given or received, only by the fact that something is either given or received. This simplification of an ominous occurrence is in accordance with

⁷² SII 73.61-64.

⁷³ SII 73.71-75 and duplicated IAT 1.19 (1990) 33, the then unpublished duplicate YBC 9694 quoted there is now published as YOS 11.75. Another duplicate is LBL 7.118. A list of texts mentioning prayers to Ursa Maior and of their incipits appears in Werner Mayer, *Hethianhungen*, from 270 above 429.

⁷⁴ See A. Leo Oppenheim, *The Interpretation of Dreams in the Ancient Near East*, Transactions of the American Philosophical Society, New Series, 46.1 (Philadelphia, 1956), with additional material in loc. 31 (1964) 153-65.

many later divinatory consultations, which restrict the answer to 'yes' or 'no'. In the late Assyrian period the haruspex evidently was only interested in learning whether the various features observed were favorable or unfavorable; adding them up he gave a favorable prognosis if the favorable features exceeded the unfavorable ones, and vice versa.⁸⁴

Another method listed in the same text for ascertaining the favorable or unfavorable outcome of some enterprise,⁸⁵ which is not specified, consists of pouring water over the head of a recumbent ox and observing its reactions: whether it gets up or not, lifts its tail or not, and the like. This particular technique was not included in the cuneiform divinatory corpus, but a similar procedure is known from Greece: "At Delphi the goats to be sacrificed were tested by sprinkling a few drops of water into their ear or on their coat to see whether the animal will remain unmoved or react to this instigation."⁸⁶ Among the Babylonian divinatory texts was included a group, attested in several exemplars, in which the movements and behavior of the lamb led to slaughter before extispicy are observed so as to foretell what the findings of the exta will be.⁸⁷

Answers couched in similar terms, that is, success or failure—literally *lašad alāhi* 'attaining (one's) desire' and *la lašad alāhi* 'not attaining (one's) desire'—are elsewhere based on omens derived from the 'shape' of shooting stars (the shape possibly denoting the streaks of light or, less likely, the shape of the meteorite found on the ground) in the omen series *šammū dū 'il a city'*,⁸⁸ while in the text concerned with 'fortune-telling' and in its partial parallel⁸⁹ it is the path of the shooting star 'from right to left' that will determine success.⁹⁰

⁸⁴ See also Starr, *op. cit.*, the song of SVA 4, pp. xxix, xxv.

⁸⁵ *lašad alāhi* 'attaining (one's) desire' = success, and *la lašad alāhi* 'not attaining (one's) desire' = failure (lines 122–38).

⁸⁶ A Delphic oracle of ox, *bovines à l'adoration leur jetant quelques gouttes d'eau dans l'oreille au moment du sacrifice* 'pour voir si l'animal restera muet ou non, fait signe de satisfaction' (Bouché-Leclercq, *Histoire de la Divination grecque* 754, also see, vol. 3, p. 170).

⁸⁷ For these texts see Mesinger, *loc. cit.* 1953, M. 1189, and 329f.

⁸⁸ See Chapter 3, Nos. 39, 197ff, 198.

⁸⁹ *LA 1.138* (see Pernot, 'Fortune-telling in Mesopotamia' [*NFS* 19 (1960) 28].

⁹⁰ For the omens significance attached to shooting stars see also Chapter V.

Before pouring water on the ox, there is an appeal to the "gods of the night," collectively called *ilu daṭānu* 'divine judges':⁹⁰

I invoke you, divine judges, in the pure heavens,
I beseech you unceasingly with prayer and prostration.
Shining torch in the midst of heaven, all the world longs for your
light.
People observe your verdicts, the weak submits to your decrees.
Divine judges whose pronouncement cannot be changed.
In this midnight watch I pour pure spring water on the forehead
of an ox.
Let me see your true judgment and your divine verdict so that I
may make a pronouncement.
Let the ox provide a verdict whether so-and-so, son of so-and-so,
will have success.

Even though the phrase *ilu mušir* 'gods of the night' does not appear in the title of the prayer, the ritual instructions that follow it, which prescribe offerings to the "gods of the night," make it clear that the prayer addresses the stars.⁹¹

It is probably also in order to secure reliable oracular answers that the prayers designated in their subscripts as *ikribu* were composed. Most of them are too fragmentary to ascertain their purpose with assurance. The word *ikribu*, a noun derived from the verb *kribu* 'to pray,' was assumed to designate a special category of prayer accompanying a nocturnal consultation by the diviner, since both the Old Babylonian prayer to the gods of the night and those of the haruspex to the planet Venus under its name Ninsinanna cited earlier⁹² have, in their subscripts, the title *ikribu*. Other stellar deities are known to have rated *ikribu* prayers, as Nougayrol has reminded us.⁹³ A text that has

⁹⁰ S11 73.110-117; see Reiner, *IES* 19 (1980) 35; the epithet 'divine judges' is in lines 110 and 114.

⁹¹ I had surmised, wrongly, in my discussion of *IES* 14 280 that 'divine judges' designate Samas and Adad, the patrons of the diviner; this suggestion was followed by Werner Mayer, *Untersuchungen* (note 273 above) 423.

⁹² Leon de Meyer, "Dieux priés *ikribu* du temps d'Ammisaduqa," in *ZAKR-Sumer: Assyriological Studies Presented to F. R. Kraus* (Leiden: Brill, 1982) 271-79.

⁹³ Reference to *ikribu* prayers to stellar deities, such as Ishtar, Sin, and Sirius, is made by Nougayrol, *OpNS* 12 (1963) 381 n. 1. For the genre *ikribu* see also Ivan Starr, *The Rituals of the Diviner* (Malibu: Undena, 1985) 44ff.

been known for a long time"⁵⁷ contains most likely three *ikribu* prayers, one to the Moon god Sin, another to Jupiter, and – the last one – possibly to Venus. The prayer to Jupiter, still incomplete, begins: "Jupiter, holy god, foremost of the gods, more majestic than the stars in the sky."⁵⁸

While the diviner depends on the stars for eliciting reliable predictions, practitioners of other divination techniques depend on the haruspex to interpret and confirm the ominous signs obtained through other media, primarily from celestial phenomena.⁵⁹ Even the prophecies of ecstasies had to be submitted to the test of hepatoscopy, a test for which the hair of the ecstatic's head and the fringe of his cloak were dispatched to represent the person on whose behalf the divination was carried out.

The long known and famous case of the diviner Asqudum in Mari is now better situated with the publication of an entire archive dealing with this haruspex who had to authenticate by performing an extispicy not only the prophecies and dreams of the ecstasies but even the prediction of a lunar eclipse.⁶⁰ King Nabonidus' recourse, a thousand years later, to liver omens in order to interpret a lunar eclipse is equally famous and often studied.

Less explicit, and thus in greater need of explanatory comments, are the diviner's interpretations of two ominous celestial phenomena under Assyrian kings: of the lunar eclipse in 714 B.C. during Sargon's eighth campaign, and of the "secret place" reached by Jupiter at Esarhaddon's advent to the throne. Both episodes are recounted in the *res gestae* of the kings, the

⁵⁷ It was published by S. Langdon, "A Fragment of a Series of Ritualistic Prayers to Astral Deities in the Ceremonies of Divination," *RA* 12 (1915) 189ff.; another piece, K. 794, published by E. C. Perry, *Heaven and Earth in 500* (Leipzig: *Semiotische Studien* 2, 4 (Leipzig, 1907) as no. 5b has since been joined to it.

⁵⁸ *Šul-pa-e* *DUŠUR* *KUŠAR* *KAL* *DUŠUR* *MIS* *MAH* *UGU* *MIL* *MES* *Ša* *al* *al* *al*, *RA* 12 (1915) 190 K. 190M.104.157 = BML 90127-14.

⁵⁹ The necessity for such a confirmation is attested among the Romans too according to Pliny the younger: "I will consult a haruspex whose expertise I have often tested. Without delay, he makes a sacrifice, and declares that the exta and the signs from the stars are in agreement." *Epist.* 2.4.2.

⁶⁰ See now J.-M. Durand, *ARM* 26 no. 81, cf. *ibid.* 495.

so-called "royal inscriptions," styled as first-person accounts Sargon's account is styled as a letter to the god Assur.⁸⁷

While Sargon was en route to Urartu the moon became eclipsed and the darkness lasted from the first night watch into the second, the haruspex, who as usual accompanied the king on his campaign, was called upon to interpret the meaning of the eclipse, a much-feared ill-portending event.⁸⁸ Sargon continued his route only upon being assured that the portent presaged victory—in his case, unlike Croesus, the prediction fortunately was not equivocal. Sargon's letter contains another allusion to a favorable portent given the king by a certain, not specified, phenomenon of Jupiter, here called "the star of Marduk."⁸⁹ The interrelation between celestial portents and liver omens is also attested, as we have seen (p. 12 above), in reference to Sargon of Assyria's third-millennium predecessor, Sargon of Akkad.

King Isarhaddon, Sargon's grandson, reports on how he secured the throne for himself in the midst of the struggle for power among the sons of Sennacherib after the king had been murdered. His rightful succession was foretold in the stars, among other favorable signs the "secret place" reached by the planet Venus is mentioned.⁹⁰ When Jupiter shone exceptionally brightly and reached its "secret place" which seems to correspond to what in Greek astrology was called the planet's "exaltation" (*hypsoma*), the sign of the zodiac in which it has the greatest influence—in the beginning of his reign,⁹¹ this sign was interpreted as a favorable portent for the rebuilding of Babylon.

The two experts in divination, the haruspex and the astrol-

⁸⁷ Thureau-Dangou, *Une relation de la 8^e campagne de Sargon* (RLE 3). The cryptic eclipse report appears in line 31b.

⁸⁸ A. L. Oppenheim, "The City of Assur in 714 B.C.," *ESL* 19 (1960) 132.

⁸⁹ "The star of Marduk (i.e., Jupiter), who went on to take up his position among stars which made me resort to arms." See A. L. Oppenheim, *Cuneiforms* 14 (1950) 121 and n. 46.

⁹⁰ Burger, *ESL* 2: 39 n. 5.

⁹¹ Burger, *ESL* 17 Bab. Ep. 15; see Schaumberger, in L. A. Sugar, *Sternkunde und Sterndienst in Babylon*, 3. Ergänzungsheft zum ersten und zweiten Band (Münster, 1935) 311f.

oger, are coupled in the accusation cited in the Assyrian letter of the crown prince Šamas-šumu-ukin to Esarhaddon.²¹⁴ "They gaze at the stars (and) slaughter lambs, (but) do not (or: he does not) tell (anything) about the king, our lord, (and) the crown prince of Babylon. Aplayu alone is a haruspeš, Bēl-ēter (and) Šamas-zera-iqiša are astrologers; they look day and night at the sky."²¹⁵ As Parpola notes, "The elaborate techniques of astrology and extispicy were seriously utilized by the royal palace in order to foresee the future course of events, and all diviners—not only those resident at court—were obliged to inform the king of their findings."²¹⁶

It is, however, the episode concerning the lunar eclipse under Nabonidus, the last of the Babylonian kings (555-539 B.C.), that best exemplifies the continuing predominance of hepatoscopy. As the king recounts it,

When Nannar requested a high priestess,
 the Son of the Prince showed his sign to the inhabited world,
 the Bright Light manifested his reliable decision.
 To Nabonidus—king of Babylon, provider for Išagil and Išzida,
 the reverent shepherd who shows concern for the sanctuaries of
 the great gods
 Nannar, the lord of the crown, who bears the signal for all peoples,
 revealed his sign concerning his request for a high priestess.
 On the thirteenth of Uluḫ, the month of the work of goddesses,
 the Fruit became eclipsed and set while eclipsed.
 "Šin requests a high priestess"—such was his sign and decision.
 As for me—Nabonidus, the shepherd who reveres his divine majesty,
 I reverently heeded his reliable order,
 so that I became concerned about this request for a high priestess.
 I sought out the sanctuaries of Šamaš and Adad, the patrons of
 extispicy,
 and Šamaš and Adad, as usual, answered me a reliable yes,
 wrote a favorable omen in my extispicy:
 the omen pertaining to the request for priestesses, the request of
 the gods to man.

²¹⁴ Edited by S. Parpola, "A Letter from Šamaš-šumu-ukin to Esarhaddon," *Iraq* 34 (1972) 21-34.

²¹⁵ *Šin* 505 *emuru* *pub idān* *inakkisu ina zūbibi šarri belim mar šarri Bābīlā* *iqibtu ma Aplayu* *udesa bādū Bēl-ēter Šamaš zera-iqiša tupšar Uluḫ* *ma Ann Enlil šinu zūbīn kola uru šamē idaggulu* (*Iraq* 34 (1972) 22, 19-25).

²¹⁶ Parpola, *Iraq* 34 (1972) 31. See also Ivan Stawiecki, *Queries to the Šangod*, SAA 4, pp. 300-301.

Elsewhere¹⁷ I commented on the imagery and poetic language of Nabonidus' inscription. What is of interest here is that the sign given by the Moon god, a total eclipse in the month of Ulûlu in the last watch of the night, a portent that is listed in the compendium of celestial omens *Enûma Anu Lûlu* with the apodosis "Sin requests a high priestess," was not sufficient for the king to act on it. The portent derived from a celestial phenomenon had to be checked by the most ancient, most reliable divinatory method, namely extispicy.

The celestial omen observed under Nabonidus was a total eclipse of the moon, an astronomical event not as rare as a solar eclipse, and one that could be predicted with reasonable accuracy shortly before the eclipse was to take place as early as the seventh century B.C. Nabonidus does not specify how the haruspex arrived at his verdict: what the features of the liver were that gave him the answer to Nabonidus' query. The wording of the king's questions indicates that the answer he expected was in terms of yes or no, and indeed he reports that the gods answered his queries with "yes" or "no." Nabonidus, whose efforts to revive and relive the past are well known,¹⁸ no doubt consciously imitated the Sumerian practice of binary consultation in regard to the choosing of a high priestess,¹⁹ even though, as already mentioned, the practice was also prevalent in the late Assyrian period.

While as late as the reign of Nabonidus the two divination techniques went hand-in-hand or complemented one another, there must have begun even then or shortly thereafter the process that culminated in the prevalence of astrology. The establishment of correlations between the features of the liver and stars or constellations, and their assignment to gods and to the twelve months of the year, must have been one of the steps in this development, a step for which we have some evidence from a late Uruk text.

¹⁷ E. Reiner, *Four Hundred Years: Nine Meroitic Ropes Cut: Poetry from Babylonia and Assyria* (Michigan Studies in the Humanities, 5) (Ann Arbor, 1985) Chapter I.

¹⁸ See preceding note.

¹⁹ As suggested by Oppenheim, *Ancient Mesopotamia* (note 179 above) 213.

A rather obscure and poorly preserved small tablet from the Seleucid period found at Warka¹¹⁷ (ancient Uruk) enumerates the parts of the liver (with which the gall bladder is, as customary, associated) or the marks on it, called "station" and the like, and gives for each a correspondence with a god, a month, and a constellation. To quote some of the better understood lines:

The 'station' is Eridu, month I (Aries)¹¹⁸
 The 'path' is Samas, month II: Taurus
 The 'sweet mouth' is Nusku, month III: Orion
 The 'strength' is Uraš, month IV: Cancer-Plow-star
 The 'gate of the palace' is Ningal, month V, Regulus
 The 'bubble' is the storm-god Adad, month VI, Raven star.
 The gall bladder is Anu, month VII: Libra.
 The 'finger' (identifiable as the *processus pyramidalis*) is god (broken), month VIII, Goat star.

Similar are the entries for the remainder of the months on the much eroded and hard to read reverse of the tablet.

The last two elements of each entry refer to the month and the zodiacal sign associated with it; these are standard, and some of them recur in the list of MUL.APIN, Tablet I.¹¹⁹ Month I (March-April) is associated with Aries, month II (April-May) with Taurus; month III with Orion in lieu of Gemini, month IV with Cancer; month V with Leo (that is, with Regulus); month VI with the Raven (Corvus), which has its heliacal rising in month VI; month VII (September-October) with Libra; month VIII with the Goat (Lynx) which has its heliacal rising in that month;¹²⁰ month X with Bél-et-balat, month XI with Aquarius; and month XII apparently with Venus. (Month IX is omitted altogether.)¹²¹

¹¹⁷ Ugleit-von Wehner, *Spl. U.*, vol. 4, no. 159; the text (W 2206014) had been very generously made available to me before publication by Professor von Wehner, the epigrapher of the excavation.

¹¹⁸ Aries can be restored from the commentary that follows, in which the name of Dumuzi is preserved, because the two Aries and Dumuzi are paired in the astronomical text MUL.APIN, Tablet I column 1 line 43, in the edition of Hermann Hunger and David Pingree, *MAA* 1978.

¹¹⁹ See *MAA* 1978, p. 179f.

¹²⁰ MUL.APIN I n. 45 and n. 4, the traces at the end of the entry in line 17 may represent the zodiacal sign Scorpius.

¹²¹ Similar are the correspondences between months and constellations in the 'Calendar texts' discussed on pp. 114f.

The novelty of this unique text is its establishing correspondences between the liver examined by the haruspex and the heliacal risings of constellations. As another unique text to be discussed in Chapter V states, correspondences between terrestrial and celestial phenomena can and indeed must be established.

The parts of the liver and the marks on it are enumerated in the sequence they are normally examined in the course of the hepatoscopy. Their associations with the deities listed can be explained in some cases only: in the case of the "bubble" associated with Adad, we can point to the Raven star called the star of Adad;¹² other associations, such as that of the mark called "path" with Šamaš, and of the gall bladder with Anu, have not yet been found in our sources. The sequence of the parts enumerated makes it certain that the starting point of the learned treatise was the manual of the haruspex and that the zodiacal signs were only secondarily associated with them.

The items of the text are accompanied by and thus were obviously deemed worthy of *scholia*, unfortunately most of the explanations offered are rather opaque.¹³

Unique as this text is in Babylonian scholarly literature, it testifies to an elaboration of the concept of the stellar influence on the configurations that the liver could exhibit and thereby to the continued vitality of the Mesopotamian divinatory tradition, while its association between stars and planets and parts of the exta, paralleled in the *Apotelesmatika* of Hephaestios from Hellenistic Egypt,¹⁴ points to wide-ranging cross-currents in the Hellenistic Near East.

¹² MUL.ŠEŠ.N 1 ii 9.

¹³ They give philological equations: for example, to month II, written with the Sumerogram G2.ŠEŠ, are the verbs ŠEŠ, or translated as *šēte še idda* "to be straight" and *id-gang* "they go", but its translation as "bull" is now broken; the connection of the month name with the constellation Taurus coordinated with it may have been further explained in the commentary.

¹⁴ David Pingree, ed., *Hephaestios Astronomica: Apotelesmatika in 12 books*, vol. 1 (Leipzig: Teubner, 1963) III 6-14-17.



FIG. 10. Bronze bell decorated with scenes of exorcisms of demons.
Courtesy of Staatliche Museen zu Berlin, no. VAN 48.

CHAPTER V

Apotropaia

Doch Abram bring ich selten
 Cauter Westwunder Deum

ipuš Ea ipšur Ea 'Ea has wrought it, Ea has loosed it,'¹²⁶ this phrase from a Babylonian incantation subsumes the essence of Babylonian magic. Ea, the god of both wisdom and cunning, and hence the figure of the trickster god, is also the god of magic. The verb from which the term *ipuš* 'wrought' derives, Akkadian *ipšur*, a common verb with the basic meaning 'to do,' is also the technical term for 'bewitching' and many nouns derived from it denote various though for us often undifferentiated machinations, such as *ipšur*, *ipšūšu*, *ipšur muppušutu*, all denoting sorcery, and *muppušu*, *muppušu*, *muppušutu*, all denoting practitioners of witchcraft.¹²⁷ The second verb form of the saying, *ipšur* 'loosed,' carries the apotropaic message par excellence, both in its Akkadian version (verb *ipšutu*) and its Sumerian counterpart, the Sumerian verb *bir*. It is from this Sumerian verb that the ritual for undoing evil, Sumerian *nam-burbi* and its loan into Akkadian, *namburbu*, takes its name. The Sumerian noun is formed with the abstract nominalizing prefix *nam* (in English, the suffix -ing) and the possessive suffix *bi*. The literal translation, 'its loosing,' refers by "it" to a previously

¹²⁶ Cf. 1 232 (1. Or. NS 40 [1971] 141-28 and 143 r. 16, Or. NS 42 [1973] 500 + 26, etc., and the references cited in Parpola *IAS* 2 p. 41 (but instead of the there cited K 137 + 278a read K 137 + 278a, edited by R. L. Caplan, Or. NS 40 [1971] 140).

¹²⁷ Similar is the usage in Croatian of the verb *činiti* 'to do' and its corresponding noun *čin* (pl. 'magic'; compare the popular saying *Ništa čini na mesecine* 'Don't do magic on the moonlight.' For Middle Latin *seferu* 'sortilegium' and the Italian derivatives *stregone* 'to bewitch' and the like, and for Greek *pharus* in this meaning see Wilhelm Havers, *Neuere Literatur zur Sprachtypologie*, Sitzungsberichte der Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse, 225. Abhandlung 5 p. 161 and n. 1.

described ominous occurrence and the implicit or explicitly stated impending evil that it portends. The suffix character of *bi* is no longer transparent in Akkadian, and hence the loan-word *namburbi* can take Akkadian possessive suffixes, *-šu* 'its' and *-šunu* 'their'. By carrying out the prescribed actions and reciting the appropriate prayers, the evil will be loosed¹³⁰ or simply 'he it will be loosed'.¹³¹

This apotropaeon was made available to man by the same gods who were willing to forewarn him through some ominous happening: the power of Ea to undo the portended evil expressed in the cited incantation is repeated in a Neo-Assyrian letter reporting on an earthquake and the evil portended by it: 'Ea has wrought it, Ea has loosed it, he who caused the earthquake has himself carried out the apotropaeon ritual'.¹³²

One expects that each collection of omens had its parallel apotropaeon ritual. But while the omen collections were serialized, that is, arranged in books or chapters with more or less canonical divisions and numbering, this does not seem to have been the case with the *namburbi* texts.¹³³ Rather, certain apotropaeon rituals are inserted immediately after the ill-portending omen, in midst of the omen collection itself; even the catalogues of omen series that cite the title of some chapter may add 'including its apotropaeon' (*and namburbišu*).¹³⁴ There are also individual tablets inscribed with such rituals alone, one or more; their subscripts do not indicate that they are part of a particular series. Still, apparently every evil portent signaled by

¹³⁰ *mašakku apsu-še, šu mašakku-še disease will be loosed*; BAM 81.7 (the affliction *mašakku*, 'quail' or 'partridge' written with the Sumeroogram BI, BI) 'will be loosed from his body' BE 51 pl. N. no. 263 r. 11 s.

¹³¹ *pa-še, B3.31 140.6, and in B3.31 12 (1954) 296-107, (Iram) 343.23, Jk.V 123.14, and passim.*

¹³² *epiš Ea epiš Ea ša ubi ipišu-še šama NAMBURBI elapaš* (in Baršela's translation in SAA 10: Ea has done, Ea has undone. He who caused the earthquake has also created the apotropaeon ritual against it. ABL 155 r. 8; see J. Assus, 35, in SAA 10 no. 561 and Lbs 2 p. 41).

¹³³ See R. L. Caplan, *The Assyrian namburbi texts: An Introduction*, SANE 11 (Los Angeles, Malibu, 1974), and for the edition of the texts idem, *Opuscula*, 34-42, 1965-73; passim. A comprehensive treatment of the genre is now available in Stefan M. Maul, *Zukunftschaffung Bagdad der Forschungen*, 18 (Mainz an Rhine, Philipp von Zabern, 1994).

¹³⁴ CT 39 30 K. 937.11, 25 NAMBURBI.

an ominous occurrence could be averted by the appropriate ritual, as we gather from those texts that list in a catalogue form¹³⁵ the events against whose evil consequences, generally simply termed 'the evil' (Sumerian *HUL*, Akkadian *lunnu*), such rituals could be invoked. If the origin of the evil was not known, one could perform the rite against 'all evil' (Sumerian *HUL.DU A BI*, Akkadian *lunnu kalamu*).¹³⁶

The ritual itself is called apotropaion (*namburbû*), a name that appears at the beginning or as subscript at the end: occasionally it is introduced by the phrase *annû namburbûšu* 'this is its lousing',¹³⁷ or is followed by a rubric which states its purpose, normally "apotropaion for the evil of such-and-such," for example, "of a snake," or more specifically "of a snake that spat-tered the man," that is, citing the ominous occurrence that augured ill.¹³⁸

Numerous are the apotropaic rituals that are concerned with ominous everyday occurrences which are listed in the two omen series *Šumma alu* ('if a city')¹³⁹ and *Šumma izbu* ('if a creature')¹⁴⁰ and which affect the common man in whose household they are observed. They include strange happenings in his house, his field, and his city in the first series, and abnormal, monstrous births in pen and fold, even among humans, in the second. On the other hand, forecasts from celes-

¹³⁵ For such catalogues see Caplan, *Or NS* 34 (1965) 109ff. and 42 (1973) 514f. (the latter subsequently published in Hermann Hunger, *SpTU*, vol. 1 as no. 6), and Finkel, *RJ* 48 (1974) 101.

¹³⁶ For example, an apotropaion against 'any evil' is recommended in the letter *LAS* no. 34 (IK 818 = SAA 10 no. 70; see Parpola, *LAS* 2 p. 35).

¹³⁷ A. Laro Oppenheim, *A Diviner's Manual*, *IES* 35 (1974) 210-56.

¹³⁸ [SAM] BL R 10, 1 R, 1 ML 5 = *annû annû namburbûšu* 'apotropaion that the evil of a snake not approach a man and his house' (*Or NS* 36 (1967) 23 no. 19-10, and *ibid.* 24 no. 20-7, etc. [SAM] BL R 8141, 1 ML 5 = *šumma izbu* (*Or NS* 36 23 no. 18).

¹³⁹ So designated by the Akkadian scribes in the subscript to each of the originally more than one hundred chapters, from its incipit *šumma alu ma mûlê šêrê* 'if a city lies on high ground'. The work was edited in part by E. Notscher, *Die Omen-Serie šumma alu ma mûlê šêrê* (*Orientalia* vol. 31 [1928], vols. 39-42 [1929], 51-54 [1930]), a new edition is being prepared by E. Leachy.

¹⁴⁰ These are the teratological omens taken from the birth of malformed children or animals, edited by E. Leachy, *The Babylonian Omen Series Šumma izbu, Texts from Cuneiform Sources*, 3 (Gütersloh, Augustin, 1964).

tial phenomena collected in the treatise *Enūma Anu Enlil* or from the inspection of the liver collected in the various chapters of the series *bārūtū* affect primarily the fate of the king and his land, and thus have a national, even universal significance. Only a few rare apotropaic rituals for averting such evils have come down to us,⁴¹ even though the titles that are listed – without their text – in the mentioned catalogues assure us of their existence. It is worthy of note that unknown, at least to me, are apotropaia to avert evil portents derived from observing the shapes taken by oil poured on water, and by observing the configurations of the smoke rising from an incense-burner, that is, lecanomanancy and libanomancy, techniques used only in the Old Babylonian period.⁴²

Were it not that the absence of a certain type of apotropaic ritual could be due to chance, the existence of apotropaia could serve as a test to distinguish two types of divinatory text. The ability to resort to apotropaic rituals would characterize those omen collections in which the situation or event warns of an impending occurrence, and the absence of apotropaia those which do not foretell the future, but give as it were a diagnosis. To the latter group belong, first of all, the diagnostic treatise "When the exorcist goes to the house of the sick person" (see Chapter III), and those compendia in which the apodosis simply describes the person's character or habits. Among the latter are the texts called "physiognomic omens"⁴³ and the texts describing physical or behavioral characteristics known as "A Guide to Moral Behavior Styled as Omens,"⁴⁴ the omens derived from a person's habits when speaking,⁴⁵ and the very similar collection establishing a person's character from his use

⁴¹ Note the subscript [*šamūtu*? *u* *qutu*] *qutu* *ahātu* ana *šarrū* u *maliku* *bāšū* "if there existed portents for the king and his land," JR 60 (edited by F. Ebeling, RA 48) (1955): 40-21.

⁴² See Chapter IV, note 258. For the relation of *namburbū* to the omen collections see R. L. Caplan, *Die Akkadisch-namburbū Texte. An Introduction*, SANE 1.1 (Los Angeles-Malibu, 1973): 71.

⁴³ F. R. Kraus, *Texte zur babylonischen Physiognomik*, Archiv für Orientforschung, Beiheft 7 (Berlin, 1959).

⁴⁴ F. R. Kraus, "Ein Sittenkatalog in Orientarab," ZA 43 (1936): 77-113.

⁴⁵ F. R. Kraus, "Babylonische Omina mit Ausdeutung der Begleiterscheinungen des Sprechens," AfO 11 (1936): 219-30.

of a greeting formula.⁴⁶ Evidently these attributes, for example, being pusillanimous, or honest, or affectionate (described in the Guide), or scratching one's nose when speaking (mentioned in the second compendium), even if they portended misfortune were not thought to be susceptible of change through a ritual, and neither were the diagnoses⁴⁷ of the causes or the outcome of the illness or its determinations about the sex and number of the children a pregnant woman was carrying.

Many a fortuitous happening, seemingly harmless, could carry a warning about a grave impending event, which could be warded off only by appealing to the gods, and what interests us here in particular, astral gods. The evil was no less to be feared if portended by a squeaky pot than by a more momentous occurrence, just as today a black cat crossing one's path is said to bring bad luck.

There is in fact an apotropaeon⁴⁸ designed to counteract the evil portended by a squeaky pot. The portent is preserved in *Šumma alu* in a sequence of omens dealing with squeaky pots of various contents, among others: "If a pot of water squeaks in a man's house."⁴⁹ The site of the ritual, which is the bank of the river or canal, is purified and offerings are made to the gods Ea-god not only of magic but of sweet water as well – and Šamaš. Before the patient recites a prayer to Šamaš, a holy-water vessel, filled with water from the well of the temple of Marduk into which herbs and beads of metal have been scattered, is to be placed "before the [] star and the Wagon."⁵⁰ After the prayer to Šamaš there is a break on the tablet, and

⁴⁶ E. Reiner, "A manner of speaking," in *STAR SUMM: Assyriological Studies Presented to E. Rieu in the Volume of His Seventy-fifth Birthday*, G. van Driel et al. (eds.) (London: Brill, 1982), 282–89.

⁴⁷ The term "diagnosis" in Cuneiform medicine includes the prognosis of the disease; see C. F. R. Jones, *The Foundation of Wisdom: Sather Classical Lectures*, vol. 52 (Berkeley–Los Angeles–London: University of California Press, 1987), 39 n. 123.

⁴⁸ AR 60:K 2587, edited by Ebeling, RA 49 (1955), 34r.

⁴⁹ *Šumma alu* but *amēli karpat me-ist*, C1 40–417; dupl. (dub. K. 10007, and *passim* in this tablet cited C 40–S 2, etc.) – *amēli* meaning 'bat'. The number 40 in C 40–S 40 (197) (= 134) which enumerates squeaky pots in lines 5–6 along with other *Alu* omens is not specific.

⁵⁰ *ma b 4-MU* [x u M U] *MAK u lu tašakkan* AR 60:241 – see Ebeling, RA 49 (1955), 36:24r.

when the text resumes, on the reverse of the tablet, we find addressees to a plurality, as the verb forms indicate; the addressees could be the three gods of exorcism Ea, Šamaš, and Asalluhi, but possibly are the two constellations to which the holy water vessel was exposed, or even all the stars – the gods of the night – as the phrasing of the prayer suggests: "I invoke you from the heaven of Anu, I implore you (etc.)."⁵¹

The holy water vessel was exposed to the stars in several other apotropaic rituals, one to ward off the evil portended by a snake⁵² and two against the evil portended by fire striking a house.⁵³ No nocturnal prayer to the stars accompanies the exposure; it is the Sun-god, Šamaš, who is addressed when morning dawns.

When a fungus that portends evil appears on the walls of a house a he-goat⁵⁴ is sacrificed before the Pleiades, while a prayer to the Seven Gods, that is, the seven stars of the constellation, is recited⁵⁵ and a yellow she-goat (UZ SR-) is sacrificed to Gula, the goddess of healing, whose celestial manifestation, the constellation Lyra, is called the Goat star.⁵⁶

If a man falls on his face and starts bleeding, obviously an ill-portending happening, he will avert the evil consequences by making a food-offering to a certain deity (the name is broken) and to the constellation Sagittarius.⁵⁷

The evil portended by various birds – described in tablets

⁵¹ *abkumūša* (the same Šr. An. *abkumūša*, JR 16 rev. 16).

⁵² ME 1 ME 5, 49, NS 36 (1967) 24r. no. 20; see note 33b.

⁵³ *IZIŠUBBA* "you expose the preparation to the stars of the night" (from ME 1 *anāššum* *anāššum*), NS 36 (1967) 287 9, 295 25.

⁵⁴ *MAŠGAL* (initial of the qualifying adjective is obscure).

⁵⁵ Caplan 19, NS 40 (1971) 143 r. 5f. *MAŠGAL* *bur-ruqa* (na KU ME 1 ME 1 KU *bur-ruqa* *mašga* *mašga* *mašga* *mašga*). Other references to the Pleiades conceived as the seven gods par excellence are RA 16 (1921) 28 and its parallels, JR 38 r. 19b and 3, 8667. Offerings are made to the Pleiades in a Hittite text (Ba3298 = KUB 25 32 = ... u 10, §12), see Gregory MacMahon, *The Hittite State Gods of the Taurus-Deities*, AS 25 (Chicago: Oriental Institute Press, 1991) 62, cf. the "Lammas of the Pleiades" (SA 2770) *4 AMMA* cited *ibid.* p. 48.

⁵⁶ Caplan 19, NS 40 (1971) 143 r. 34. *UZ SR-* and *Gula* KU 1-15.

⁵⁷ *kurumma-su arsa* [...] u BA 67 SA 6 GAR-ma Šr. *ti-su* "he should present his food-offering to [...] and to Sagittarius" CT 37 46:7 (Summa Aš. Tablet 87, to be published by Ann Guinan).

ΑΓΟΙΝΟΡΑΙΑ

65¹-67 of the omen series *šaruma ālu*, which deal with the appearance and behavior of birds in a man's house¹⁶—is averted by an apotropaic ritual with prayers to the stars:

Incantation. Mighty stars who have resplendent positions in the sky.

The g[reat] gods have created you, wise Nu[dimmud] (Ea)
has | you."

The names of the gods Enlil, Ea and possibly Šutpae follow the next fragmentary line - the last line before the break - with its mention of "stars" possibly refers to the stars of the three "paths" of Anu, Enlil, and Ea,¹¹ that is, all stars rising over the three "paths" on the horizon.¹²

Similar in tenor is the prayer²² in the parallel text meant to avert the evil portent of a "bird," probably a bat:²³

8 [Incantation: You, mighty stars, whom Anu and Enlil have created].

⁴⁹ (Follet, 1994; Jupiter, 1995).

10. [You] mighty stars who [have resplendent] positions in the
sky²⁴

In rare occurrences the celestial power is addressed because

¹⁰ P. Natchez, *The Ojibwa-Sault Ste. Marie and the St. Ignace Reservation* 51-54 (1940) 149ff., and S. Noyes, *The Ojibwa-Sault Ste. Marie* (Ph.D. diss., University of Pennsylvania, 1976) pp. 149ff. and 212ff.

¹⁵ [C. S. V. + ME š xasru] is in a same manzila kaphu.

also reflected in the number of studies that did not demonstrate a statistically significant association between the use of a condom and the risk of HIV infection. The authors concluded that the use of a condom is an effective method of preventing HIV infection.

by an apostrophe, ritual to assert the end of a clause. (By 1958, 1959, rev. 30-40 edited by R. L. Giphys, ed. N. S. S. (1967) 28-31)

^a The first three values are calculated from the following equation: $\text{H}_2\text{O} = \frac{\text{SO}_2 + \text{CO}_2}{0.79}$.

¹⁰ See Introduction p. 5 and end p. 12.

⁶ Kim 500 lines is not edited by S. I. Kaplan, 1982. NY 30 (1982): 244.

⁵⁰ BULB. FLABELLIFERA. The identification with "bulb" is suggested by the description BULB. FLABELLIFERA NO. 457. NITS and NO. 52. 102-56 and 57 - probably *diadema* and not *simplex* as in NITS 1. *Artemesia glauca* (blown off a male bat that goes about at night catching flies. B45F 47a-49)

4.1. $N = 1$ $U(1)$ gauge theory. The $U(1)$ gauge theory is a special case of the $U(N)$ gauge theory with $N = 1$. The Lagrangian is given by

[illegible]10 | MEU MEU gastou 50 mil e não sabe mais | 3

Since line 8 of Rim 510 corresponds to line rex. 8 of Bu. 91.7.9.153, and line 10 to line rex. 7, we conjecture that the mention of Iupitar (Sulpaal) in line 9 was present in the broken part of rex. 9.

gestive title "A Babylonian Calendar of works, seasons, and months," echoing Hesiod's *Works and Days*.¹⁷ This allusion notwithstanding, there is no work in Babylonian literature that would parallel Hesiod's. As for those texts that indicate the days and the months suitable for carrying out ritual or magic manipulations, they will be our concern later insofar as these moments are affected by astral positions.

The Babylonian almanac or calendar exists in two arrangements, one according to the enterprise envisaged, and the other according to the month. In the first, each activity forms one paragraph, and the prognosis for each month is stated in the style normal for omens: for example, the first paragraph – from which the name of the series was taken – states "If he tears down (*iqur*) his house in Nisanu (i.e., month I), he . . . it in Avaru (month II). . . ." and so on. Hence, each paragraph consists of normally twelve entries, one for each month of the year, and occasionally of thirteen, if it also includes the intercalary month of the Babylonian calendar, that is, the month that was periodically added so that the year, made up of twelve lunar months of twenty-nine or thirty days, could be brought into agreement with the solar year of 365 and a fraction days. The other arrangement¹⁸ excerpts these paragraphs according to months, so that under each month all pertinent activities are listed along with the prognosis for him who would perform them. Not all of these "monthly sets" are extant, though some of the months exist in duplicate copies to show that different traditions singled out different activities worthy of inclusion.

In fact, only the first sixty-odd paragraphs record activities whose outcome may be favorable or not. The last forty paragraphs deal not with intentional undertakings, but with the forces of nature, and the transition between the two sections is formed by paragraph 66 that deals with fire – presumably lightning – striking a house. From paragraph 67 on the topics are the ones treated in the compendium of celestial omens, the series *Enūma Anu Līlī* "When Anu (and) Enlil,"¹⁹ but include

¹⁷ René Labat, *Le calendrier babylonien des travaux, des saisons, et des mois* (Paris: Champion, 1965).

¹⁸ Called "*iqur qur* mensuel" by Labat, and version B by Weidner.

¹⁹ See p. 12, note 3.

only a selection, and the predictions differ according to the month in which a particular phenomenon takes place. The list of ominous celestial events varies with the different sources, ranging from the always present predictions from eclipses of the moon and of the sun, haloes of the moon, first appearance of Venus, and a few meteorological phenomena, among them thunder, rain, and earthquakes, to risings of other planets⁷⁰ not attested in every source. In spite of the crude reckoning that can have no claim to astronomical precision – days (in addition to months) are stated only in regard to the visibilities of Venus while the other phenomena are described solely in terms of months, and those schematic thirty-day months – concern with celestial phenomena is manifest in these texts too. The list of the paragraphs concerned with celestial and meteorological events (§104 in Labat's edition) is followed by a paragraph (numbered §105 in Labat's edition) that lists the twelve months and assigns each to a god or goddess. In one exemplar, VAT 9772, which lists only twelve months and omits the thirteenth, the series does not end there but continues with additional material. Unfortunately, the ends of the lines, which are all that survive, show only that further predictions were listed, but not what the phenomena were from which these were derived.

Concatenating several series is not unique to this text. Elsewhere, different lexical texts are combined into a single composition, possibly reflecting the sequence of the scribe's curriculum, e.g., in some recensions to the 24-tablet series *Har-mu* – *Tabullu* was added, as Tablet 25, the list of professions *lu* = *še*;⁷¹ and one copy of a recension of *Summa ālu* omens is followed by omens excerpted from the celestial omen series *Futūlu Anu Enlil*⁷² while another copy continued with the series *Summa šikinšu*, the incipit of which is quoted as the omen tablet's catch line. The second tablet of the astronomical compendium *MUL.APIN* has a catch line *MUL ŠAG.MEGAR*

⁷⁰ Jupiter and Mercury are attested – see René Labat, *Les Calendriers babyloniens des tablettes des sages et des mois* (Paris: Champion, 1965) 170 n. 6, and so is Mars in the list for month IV in BM 26185 communicated to me by Douglas Kennedy.

⁷¹ See Miguel Civil, *MSA*, 12 p. 90.

⁷² CT 41.20, reverse 31–37 contains celestial omens.

"*Šul-pa-ē*, an incipit which is attested on several fragments and lists.¹²⁰

Just as there are apotropaic rituals to avert the evil consequences of such everyday occurrences as are enumerated in the series *Šumma alu* and in the series *iqqr ipuš*, others, against the evil portended by celestial happenings, also exist but in a smaller number, the more regrettable as there are Arabic and Indian magical texts with which it would be interesting to compare them. Of a quite different character are the prolonged and public expiatory rites performed when a lunar eclipse occurred.¹²¹

The existence of rituals to avert quite specific ill-portending celestial phenomena can, however, be inferred from the "universal catalogues"¹²² that we may call "HUL-lists" from the words that begin each line: *ma HUL*, Akkadian *ma lumma*, 'from the evil of.' The sequence of celestial phenomena whose evil consequence is to be averted is the same in the HUL-lists as the sequence of topics in the compendium of celestial omens *Enlilma Anu Enlil*: Moon, Sun, weather-phenomena (including earthquakes), and stars and planets, also known as the four books *Šin*, *Šamaš*, *Adad*, and *Ištar*, and the sequence of those paragraphs of the series *iqqr ipuš* that parallel the celestial omen compendium. One catalogue¹²³ enumerates, possibly with reference to the king, eclipses of, first (in a broken section) the moon, then of the sun and of Venus, as well as flaring up of stars, earthquakes, and various cloud-configurations: "when [...] an eclipse of either the Moon [...] or of the Sun or of Venus, or a flaring' [star (or . . .)] or an earthquake [or . . . or a] cloud' or a fireball' or an *asqušlu*-phenomenon is seen."¹²⁴ A list of evil portents taken from stars and planets is preserved in a

¹²⁰ See Hunger and Pingree, *MIL*, 1715, 81.

¹²¹ See Werner Mayer, *Untersuchungen zur Formensprache der babylonischen Gebetscharaktingen*, *Studia Pohl*, Series Mayor 5 (Rome: Biblical Institute Press, 1976) 100n.

¹²² Termed "general (allgemeine) namburbi-tablets" by Erich Ebeling, *RA* 48 (1974) 3.

¹²³ LKA 108, edited by Erich Ebeling, *RA* 50 (1976) 26.

¹²⁴ *enigma LU(GAL) . . . ANTA LU lu ša Šin lu ša Šamaš lu ša Ištar lu maš-qa-ih' ANU . . . lu riba lu . . . lu A[Šur-Ezer read AS. DU? andugū?] lu akkullu lu isqušlu LU*, LKA 108 13fr.; see *RA* 50 (1976) 26.

of] the star that tell into your house" and reciting a spell in Sumerian⁶⁰ and a prayer to Šamaš in Akkadian. How a shooting star could land in a man's house is difficult to imagine, but portents from shooting stars are not only known from standard omen collections⁶¹ but are requested as answers to the petitioner's question in the popular media of divination more akin to "fortune-telling," as I have had the occasion to show.⁶²

The compendium *ip̄ur ip̄is* combined the activities and phenomena of everyday life listed in §§1-66 with the portents announced by celestial bodies in §§67ff. The compilers of *ip̄ur ip̄is* simply juxtaposed omens reflecting the two domains of heaven and earth and, correspondingly, public and private forecasts. Rare is a true conflation of the two, of which we saw a late example (p. 78) establishing a relationship between parts of the liver examined by the haruspex and zodiacal and other constellations. An effort to establish a relation between omens portended by various media was begun, however, even earlier. Speculations to this effect are set out in a text already known under Assurbanipal, from whose library its exemplars come. It was edited by Leo Oppenheim under the programmatic title "A Babylonian Diviner's Manual."⁶³ The text is a rarity not only in regard to its subject matter but especially in its attempt to give a rationale for the correspondences between signs observed in the sky and signs on earth, in contrast to the Mesopotamian approach which, as we have seen, does not normally give reasons or explanations.

The interconnections between celestial and terrestrial omens are stressed several times but they are eventually expressed in the simple terms: the portents on earth and those in the sky correspond. The task of the diviner, as we can infer from the

⁶⁰ The Sumerian spell begins with mul 5 NUN ta is a star which has come out of the E-SUN, 5 NUN, Akkadian *agnom* (for which see Caprice, "E-SUN in Mesopotamian Literature," *JNES* 42 [1973] 299-305) elsewhere is both the underground abyss and the temple that corresponds to it on earth (see ibid. 304f).

⁶¹ See p. 72.

⁶² In "Fortune-Telling in Mesopotamia," *JNES* 19 (1960) 28f., and see above p. 72 and note 299.

⁶³ A. Leo Oppenheim, "A Babylonian Diviner's Manual," *JNES* 33 (1974) 197-220.

statements of the author, is both to interpret the signs as they are observed individually, and to establish a relation between the terrestrial and the celestial omens. It is noteworthy that this "manual," as much as it proclaims the correspondence (in the Baudelairean sense) of terrestrial and celestial omens, is written on tablets some of which are also inscribed with planetary omens. "... our difficult text is witness to the renewed vigor the Mesopotamian scholar brought to bear on enlarging and refining previous divination techniques in the outgoing second and incoming first millennium: a vigor which created a plethora of new forms and methods of divination while at the same time it carefully maintained the heritage of the early second millennium achievements."⁴⁵

The text's first explicit statement:⁴⁶ "The signs in the sky just as those on earth give us signals,"⁴⁷ follows the listing of incipits of "fourteen tablets with signs occurring on earth" and the second, even more insistent, "The signs on earth just as those in the sky give us signals, sky and earth both produce portents, though appearing separately they are not separate because sky and earth are related," is the subscript to a list of incipits of "eleven tablets with signs occurring in the sky."⁴⁸ The correspondence between the two domains extends to the consequences of the portents, as the Manual continues with a warning about evil-portending signs: "A sign that portends evil in the sky is evil on earth, one that portends evil on earth is evil in the sky,"⁴⁹ and about the necessity of calculating whether it is susceptible of apotropaic rituals or not.⁵⁰ The next rubric gives the grand total of the two groups of tablets: "In *summa* twenty-five tablets with signs (occurring) in the sky and on earth whose good and evil portents are in harmony(?). You will find in them every sign that has occurred in the sky (and) has been observed on earth. This is the method to dispel (them): . . ."⁵¹

⁴⁵ Oppenheim, *JNES* 33 (1974) 210.

⁴⁶ Translations are those of Oppenheim.

⁴⁷ 704 24.

⁴⁸ 2101 38-40.

⁴⁹ 200 41-42.

⁵⁰ 2001 43-46.

⁵¹ 200 53-54.

Even though far from "every sign" can be found in the twenty-five tablets whose incipits follow,⁴⁰ we should note the significant statement that there exists "a method to dispel them." This method, for which precisely the term for apotropaion, *namburbû*, is used,⁴¹ is not a simple catalogue of apotropaic rituals similar to the ones quoted on pp. 83f., but rather instructions for establishing, by astronomical calculations, the exact date of the event and for finding in a hemerological table appended to the Manual the month and day when such rituals can be effective.⁴²

The already mentioned Uruk text with its correspondences of parts of the liver with times (possibly indicating zodiacal signs) and celestial bodies, the correspondences drawn between the signs of the zodiac and the performance of apotropaic rites (see Chapter VI) and the Diviner's Manual all indicate various tentatives to refine the techniques or, to use Peter Brown's term, "the technology of sorcery in the ancient world,"⁴³ into more sophisticated methods that culminate in Hellenistic astrology, and thus testify, as I have had occasion to stress earlier, to the continued vitality of the Mesopotamian divinatory tradition.

⁴⁰ For a discussion of the significance of this statement see Oppenheim, *JNES* 33 (1974): 208.

⁴¹ *amû namburbû* "this is their [their] [loosing]".

⁴² "The *namburbû* presented in our text consists in establishing the exact date of the event observed by means of sound astronomical observations and calculation, and in gleaming from the appended hemerological table whether the month or the time of day was propitious or not for the undertaking planned when the omens occurred." Oppenheim, *ibid.* 209.

⁴³ Peter Brown, "Sorcery, Demons, and the Rise of Christianity," in *Witchcraft, Confessions, or Accusations*, Mary Douglas, ed. (London: Tavistock 1970) 18.

CHAPTER VI

Sorcerers and Sorceresses

Nunc mensura est sciri, non tunc sidus, item
Seneca, *Medea* 750

Sorcerer and sorceress⁴⁰ could coerce the power inherent in the celestial bodies for evil purposes, as we learn from the very rituals that are designed to counteract the machinations of these magicians. Rituals for curing an ailment or other affliction suspected of having been brought about by such machinations are prescribed when "witchcraft was practised against that man before the such-and-such star."⁴¹ The words 'witchcraft' (*upšu*) and 'was practiced against him' (*upšūšu*) belong, as we saw, to the family of the verb *upšu* 'to do,' that is also the technical term for 'bewitching.' Another term for witchcraft or sorcery, *kišpu*, belongs to the family of words that includes the terms for sorcerer (*kiššapu*) and sorceress (*kiššaptu*), derived from the verb *kišpu* 'to bewitch.'

In Babylonian sources, the witches carry out their magic "before" a star, and they are not known to bring the stars down from the sky as Medea raved⁴² nor do magic texts reveal that

⁴⁰ For 'sorceress' many descriptive terms, mostly designating those women as coming from foreign parts, are known: see Text Abusch, "The Demonic Image of the Witch in Babylonian Literature," in *Religion, Science, and Magic*, Jacob Neusner et al., eds. (New York/Oxford: Oxford University Press, 1989) 27-30.

⁴¹ *ana aruh šuutu ana pān MUL.KK upšu upšūšu* *SP.89.50*, etc.; see below, pp. 103ff. for references (*Ishtar Simas*, *RAM.461* and dupls., *Scorpius*, *B.M.203*, *Ursa Minor*, *AM.444*); see Marie Louise Thomsen, *Zauber, dämonie und Schicksal: Magie in Mesopotamien*, The Carsten Niebuhr Institute of Ancient Near Eastern Studies 2 (1987), 80 nn. 89-91.

⁴² *Haec ille vasti more torrentis, aequis
descendat anguis, campis amplexibus dedit,
maior, nunc quoque sentruit, nodos, tectae
(maior) Pelasgis apta, Soloris minor.*

they bring down the moon. To this feat there is only a cryptic allusion in a Neo-Assyrian letter. Nevertheless, it is this allusion that establishes yet another link between the Mesopotamian and Classical cultures, and at the same time makes us aware of the constraints imposed on our understanding by the paucity and the accident of preservation of the data.

The allusion is found in a Neo-Assyrian letter written to King Esarhaddon in the seventh century B.C. which contains the following passage:

As for the messengers whom the king, my lord, sent to Guzana, who would listen to the disparaging remarks of Tarasi and his wife? His wife, Zaza, and Tarasi himself are not to be spared. Their women would bring the moon down from heaven!¹⁷

We might easily have dismissed the last sentence as a simple hyperbole would it not remind us of the often-celebrated feat of "the Thessalian witches who draw down the moon from heaven"¹⁸ mentioned by Plato, the feat of drawing down the moon that had become in Latin literature the hallmark of sorceresses, expressed by the Latin phrase *detrahere lunam*, or *deducere lunam*.¹⁹

The power to draw down the moon was attributed especially to the sorceresses of Thessaly, a land of magic compellingly described by Lucan in *The Civil War*:

I want the Snake that lies up there to come down here like a gigantic torrent. I want the two Bears, the big one, useful to Greek ships, and the small one, useful to Thracian ships, to reel the Snake's enormous coils.

¹⁷ Serapis, *Meiser* 694ff.

¹⁸ 472a33-34: 18-21 recopied with new joins CT 53.4: rev. 26f. The cited translation was made in 1930 by Lancel Waterman, *Frederick Maria Fales, A/c* 27 (1980) 161 translation: "The women of these people, they would bring down the moon from the sky."

¹⁹ Plato, *Gorgias* 503A.

²⁰ Sophie Lurans, *Kéryreutes sur la lune. I. Les auteurs latins de la fin des Guerres Puniques à la fin du règne des Antonins. Etudes Préliminaires aux religions orientales dans l'empire romain*, M. 1. Vernaseren, ed., vol. 72 (Londres: Brill 1979), chapitre XI. Le pouvoir des magiciennes sur la lune, pp. 225-33. See also Anne-Marie Tupet, *La magie dans la poésie antique. I. Des origines à la fin du règne d'Auguste* (Paris: Les Belles Lettres, 1976), Chapitre VII. La descente de la lune, pp. 92-103.

SORCERERS AND SORCEPASSES

The pregnant fields a horrid crop produce,
 Noxious, and fit for witchcraft's deadly use;
 With baleful weeds each mountain's brow is hung,
 And listening rocks attend the charmer's song.
 There potent and mysterious plants arise,
 Plants that compel the gods, and awe the skies.
 There leaves unfolded to Medea's view
 Such as her native Colchis never knew.⁴²

In this land the witches exercise their magic power to draw down the moon:

Magic the starry lamps from heaven can tear,
 And shoot them gleaming through the dusky air,
 Can blot fair Cynthia's countenance serene,
 And poison with foul spells the silver queen

 Held by the charming song, she staves in vain,
 And labours with the long pursuing pain
 Till down, and downward still, compelled to come,
 On hallow'd herbs she sheds her fatal train.⁴³

A more prosaic translation of the last section, this one by Robert Graves:⁴⁴ "Witches have introduced the art of dragging the stars from the sky; and know how to turn the Moon dim and muddy-coloured, as though she were being eclipsed by the Earth's shadow - after which they pull her close to them and torture her until she secretes poisonous foam on the plants growing underneath."

⁴² The verse translation is that of Nicholas Rowe from the early 18th century.

⁴³ *Illic et sidera primum
 praecipiti deducta polo Phoebeque serena
 non aliter dips verberum obsessa venepis
 palluit et ignis terrenisque ignibus arat
 quam si traterna prohiberet imago tellus
 insereretque stans flammis caelestibus umbras
 et patitur tantos cantu depressa labores
 donec suppositas propior desumeret in herbas*

Pharsalia (also known as *De bello civili caesare-julio*).

⁴⁴ Robert Graves, *Lucan: Pharsalia* (Penguin Books, 1957) 341. A more recent verse translation is that of P. F. Widdows, *Lucan's Civil War* (Bloomington: Indiana University Press, 1968).

The sorceresses' ability to draw down the moon, which is attested even in modern circum-mediterranean popular lore,⁴² has been given a rationalist explanation not only in modern times; the means to achieve this feat (with candles, water, and mirrors) had been denounced already in the fourth century by bishop Hippolytus of Rome.⁴³

The connection between the Classical topos and the reference contained in the Neo-Assyrian letter has been overlooked for many years.⁴⁴ It in Greek and Latin poetry "bringing down the moon from heaven" was already a topos,⁴⁵ associated with the sorceresses of Thessaly,⁴⁶ or with barbarians, for example by Lucian in his *Lovers*.⁴⁷ Lies with a Hyperborean, the origin and original referent of this strange image are unknown. We may assume that it was already well known by the seventh century B.C., when it appears in the quoted Neo-Assyrian letter, since, in speaking of the barbarians of Guzani in Syria, the simple allusion to "their women who bring the moon down from heaven" sufficed to brand them as witches. Even further, while Greek and Latin poets often allude to this feat of the sorceresses - the most famous being perhaps the verse "Charms (that is, incantations) are able to draw the Moon

⁴² See Lupat, *op. cit.* (note 419) 373.

⁴³ *Refutatio omnium haeresium* IV, 31. Doncker and E. G. Schneidewin, eds. (Leipzig: Teubner, 1899).

⁴⁴ In fact, Evelyn Waterman in 1920 not only translated the letter as cited, but in his Commentary refers to a certain Sina-Schiffer, and if we follow up this reference to the journal *Zeitschrift für Assyriologie* (January 1926, p. 34, p. 38) Schiffer had founded in Paris to promote collaboration between French and American scholars, but which did not live beyond its first year, we find that he speaks of the Classical origin of "this allegorical locution." Unfortunately, Waterman's Commentary is hardly consulted nowadays, and so his insight into the connection between the letter and the Classical parallels has borne no fruit.

⁴⁵ See S. Lupat, *op. cit.* (note 419).

⁴⁶ quae sidera exarptata voce Thessala
lunamque caelo deripit

"who using the Thessalian incantations, tears the stars and the Moon from the sky."

Horace, *Epod.* 7:45-46, cited Lupat, p. 225. For the association of Thessaly with magic and sorceresses see also G. W. Rieuwoldt, "Zur Geschichte des römischen Thessaliens," *Rheinisches Museum* 108 (1965) 278.

from the sky"⁴² of Virgil's *Fifth Eclogue*—there is no reference, to my knowledge, to this feat either in the poetry of the Babylonians, or in their astral magic. It is true that the male Moon god of the Sumerians and the Semites has less affinity with the 'wise women' of Mesopotamia than the goddess Selene, Cynthia, or Luna of the Greeks and Romans. Perhaps it is for this reason that it was the power of the stars that Babylonian sorceresses and other magicians were using to carry out their machinations.

The means of affecting the intended victim involve, as in other cultures, the use of figurines made of *hinnu*⁴³ or, more directly, imbuings with sorceries, in Akkadian *lispin*, the food he eats, the water he drinks, and the oil he uses as body ointment. An elaborate ritual extending throughout a whole night, called *Maqlû* 'Burning' is designed to counteract these evil machinations by burning figurines of the person suspected of having wrought sorcery.⁴⁴ The ritual begins, appropriately, with a prayer to the "gods of the night": "I invoke you, Gods of the night, with you I invoke the night, the veiled bride, I invoke (the three watches of the night) the evening watch, the mid-night watch, the dawn watch."⁴⁵ It is from such rituals, and from the proscription of black magic found in the law books (the Code of Hammurapi and the Middle-Assyrian Laws) that the machinations of sorcerers and sorceresses can be documented, since instructions for practicing such noxious magic have, for good reason, not come down to us.⁴⁶

The effect of "witchcraft practiced before the such-and-such star" is manifested in a number of afflictions, physical as well

⁴² *varmima vel caelo possunt deducere Lunam*, Verg. *Ec.* 8.100.

⁴³ See Christopher A. Faraone, "Binding and Burning: the Forms of Evil: The Defensive use of Voodoo Dolls" in *Ancient Greece: Classical Antiquity* 10 (1993) 165-90; also, in a partly different version, in *Antiquities and Roman History* (Oxford University Press, 1992) 74-93, Chapter 4.

⁴⁴ See Levi Abusch, *Maqlû*, in *BZ* 71 (1966) 246-51.

⁴⁵ *alsikinnû ša mušān izkurawu alsu mušātu kallatu kuttuppu alsu barāntu qablitu u namāntu*.

⁴⁶ Note the two unusual and difficult texts containing a self-curse, each addressed to a god, for which see: Erich Ebeling, "Ein babylonischer Beleg für schwarze Magie," *Ze. N. S.* 29 (1951) 167; *Grund und Ursprung von Soden*, *Jahrb.* 71 (1951) 267; ad LIT 4.171 (the latter text revisited with collations by Michael Streck, *ZA* 83 (1993) 61-65).

as psychological, that are described in the opening words of the treatment. The names of these afflictions are usually written with Sumerograms, that is, a group of cuneiform signs whose literal meaning can usually be derived from their Sumerian constituent elements, but for which the Akkadian equivalent is not always known, and whose exact meaning is by no means securely established.

Nevertheless, the very names of certain diseases or disabilities indicate their astral cause: 'semen of Jupiter,'⁴³ "'hand" (ŠU) of Sin (i.e., the Moon) or "'hand" of Šamas (i.e., the Sun),' and "'seizure" by Lugalirra,⁴⁴ one of the twin gods who, with Meslamtaea, represents the Twin stars, Gemini. The nature of the relationship of the disease to the deity said to have caused it with his "hand" or his "seizure" is usually impossible to determine. As to the "semen" or "sperm" of the stars⁴⁵ describing certain illnesses, it may be a name for "dew" (which is elsewhere called "Blood of the stars"),⁴⁶ since dew is said to descend from the stars, and dew can be maleficent—"the evil dew of the stars"—as well as soothing.⁴⁷

Most frequently mentioned among the magic afflictions diagnosed as inflicted with the connivance of the stars is the one called 'cutting the breath.'⁴⁸ Since according to the rubric of one such ritual "'cutting the breath' has been practiced against

⁴³ *maš-šap-pa-er*. Names composed with 'semen' or 'sperm' and the name of a god appear among 'secret' names given to herbs in Pt. III AII 401, etc. (see p. 11 above); see H. Oppert, *Chébraires et autres*, vol. I 6493, and the herbal of Pseudo-Dioscorides mentions the plant 'Sperm of Hermes' (see ibid. 6494). Whether the 'sperm' of the stars refers to a particular ingredient or is to be understood as 'dew' is unclear. Note the designation 'Blood of the stars' given to dew by dream-interpreters among other such fancy names employed by Artemidorus (*Oneirocritica* 4.22 (note 132 above), cited Huxley, vol. I 6496).

⁴⁴ See the text 8/1 98 cited presently.

⁴⁵ *eribut-kakkabim*. ABL 18.21957. 581.83 v. 12.

⁴⁶ See the Artemidorus reference cited in a preceding note.

⁴⁷ See note 240.

⁴⁸ Another translation is 'throat-cutting.' The ambiguity stems from the various meanings of the Sumerian element *zi* of the loanword *zi-ra-a-bi* (from Sumerian *zi-ra-a-bi* *zi* and *bi*), its Akkadian equivalent *napštu*, that can mean life, breath, and throat as well. For literature and suggested identifications see Kocher, 643f IV p. xxv n. 26.

the man in front of Sirius;⁴³ the cure is sought from Sirius too. It takes the form of a complex ritual with alternating libations and prayers to (literally: before) Sirius. The rites are performed in a curtained-off enclosure prescribed in other rituals too⁴⁴ and the prayer⁴⁵ is recited three times with the appropriate "lifting of the hand." The instructions say: "facing Sirius you sweep the roof, you sprinkle pure water, you strew juniper on a censer (aglow) with acacia-embers, you libate fine beer, you prostrate yourself, you draw the curtains, you set out heaps of flour, you purify that man with censer, torch, and holy-water basin, you have him stand inside the curtains on garden herbs", he lifts his hand, recites this 'incitation' three times, each time he recites it he prostrates himself and tells everything that is on his mind, and then the wrath of (his) god and goddess will be loosed, the sorcery and machinations will be loosed."⁴⁶

Several evil machinations are enumerated in a long text, which is identified as an excerpt from the medical compendium *When one approaches the patient*, itself a sub-series of the diagnostic omen series.⁴⁷ The patient may suffer from such

⁴³ [KA] [NIM]MA šumma amēlu ina pan MLI KAK SUSA ZI KU 10. 17A epusšu[DU] (su), BAM 461 m. 4.

⁴⁴ For example, "you draw the curtain as a dancer would do" also "the ceremony performed in the curtained cubicle on the 13th day, etc." see CAD § 2 s.v. *šalālu* B.

⁴⁵ In one of the exemplars the prayer is dubbed a "lifting of the hand" prayer (for which see p. 17) and was published along with the extant part of the pertinent ritual by Werner Mayer (*Chetwachtungen zur Lesungssprache der babylonischen Chetwachtungen*, Studien Vordr.-series Major 5 (König: Biblical Institute Press, 1976) 540). The subscript is preserved in BAM 461 and in its fragmentary duplicate BAM 462 which gives a more complete version of the ritual but preserves only part of the prayer.

⁴⁷ ina pan MLI KAK SUSA ura-takabbu mesellim tasallat nigrak burāšu ina peni asgi tasarra šikara-re-ita taršapp taršken šidde šasaddad zidub dubbē lillanadda amēlu šuāra nigrakka girillu agubba tallelma ina birn šidde ma mulita šampy-kis tušassuma qrešo mālā minotu ārodu 3-šu imannu emā intanu ukkēn u āmima mala libbāša sabtu stabbatena kumdu šu p[istari] patrašin kalpu-pšu p[attaru], BAM 461 m. 3-13.

⁴⁸ According to the subscripts in lines 102 and 215 these are the 23rd and [24th] tablets of the compo-series (102 B 23' KAM MV and C40, ina TE-ka, 577.89.102 [102] B KAM MV and C40, ina TE-ka, 577.89.215). In the catalogue to the diagnostic omen series published by F. L. Finkel in *A Sumerian Horologist: Studies in Memory of Abraham Sachs*, Eric Leachy, M. del

afflictions as the previously mentioned 'cutting the breath',⁴⁴⁴ 'seizure' by Lugalirra,⁴⁴⁵ 'semen of Jupiter',⁴⁴⁶ and 'hand' of Sin or 'hand' of Santaš,⁴⁴⁷ or 'epilepsy',⁴⁴⁸ and diseases called with such opaque names as 'hatred',⁴⁴⁹ other afflictions may have been described in the broken sections. That these were wrought by magic means can be inferred from enumerations of the same afflictions in other sources among effects of witchcraft;⁴⁵⁰ in this very text one of them is attributed to the placing of a figurine of the man in a grave with a dead man⁴⁵¹ and another to the fact that wax figurines of him were 'laid down',⁴⁵²—no doubt also in a grave or some other gruesome place. That some, perhaps all, of the strange-named and sorcery-induced diseases refer to psychological disorders has also been suggested.⁴⁵³

One affliction called by the seemingly transparent name

[Ellis, P. Garand, eds. (Philadelphia: The University Museum, 1988) 346; this supposition is supported by tablets ID, XV, and thus the serial number '23' given in the Sultantepe text possibly is a distorted reading for which see already O. R. Gurney, *Chaldean Magic Tablets*, vol. 1, p. 8. Recently M. Stol has proposed to read in this text an older version of the day-book series in *Epigraphische Babylonica* (Vandenhoeck Monographs 200) (Göttingen: W. Stey, 1987) 91ff.

⁴⁴⁴ *ammaru* (2190) 160, 161, lines 22, 33, 47, etc.

⁴⁴⁵ *Lugalirra* (2190) 160, 161, lines 105, 111, 116, 126, 133.

⁴⁴⁶ *semen of Jupiter*, lines 169, 176, 186, 190.

⁴⁴⁷ line 211.

⁴⁴⁸ *ammaru* (2190) 160, 161, lines 136, 143, 150, 162.

⁴⁴⁹ *ammaru* (2190) 160, 161, lines 82, 89, 93.

⁴⁵⁰ Compare, for example, the enumeration *ke-pi ru-hu ru-su up-ga-gu* in tablet NO 19 (LUGALIRRA) 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

⁴⁵¹ (2190) 160, 161, line 7.

⁴⁵² *ammaru* (2190) 160, 161, line 101.

⁴⁵³ Edith K. Butler and I. A. Kanner Wilson, 'Prescription for an Anxiety State: a Study of B.M. 234', *Anatolian Studies* 30 (1980) 23–30.

'seizing of the mouth',⁴⁴ and which therefore has been taken to describe aphasia,⁴⁵ that is, an inability to speak, can be shown to have been imputed to evil magic by referring once again to Classical sources. In the *Wasps* of Aristophanes a dog is put on trial, accused of stealing a piece of cheese. When he takes the stand, the dog, famed for his barking, is suddenly and strangely silent. The president of the mock tribunal, concerned lest this silence be interpreted as an admission of guilt, is ready with a precedent for such an incident: he quotes the case of a certain Thucydides, son of Melesias, who suffered the same mishap when he was on trial – he suddenly became paralyzed in his jaw.⁴⁶ According to the *scholia*, this Thucydides, an excellent orator, after he had heard his accusers make their case in the course of a trial, was not able to plead his own defense, just as if he had a tongue which had been bound from within. In this way he was convicted and afterwards ostracized.

Other stories also recount inexplicable seizures suffered by "... even experienced orators while pleading at the bar", further testimonies⁴⁷ come from inscriptions and from the life of Libanius, the famous orator of the fourth century A.D., who was accused of having cast a spell on a rival whose memory failed in the midst of a speech. Libanius himself tells us in his

⁴⁴ *schol.* p. 10A 1110B 1131, line 101.

⁴⁵ Also translated *deafness*, see e.g. *AP Z*, see *phrenitis*. For a medical prescription for KA 1110B 1131 see *Γ' ἰατρικὴ ἀντίδοτος* to KA 1110B 1131, seventeen tested herbs for 'seizing of the mouth'. F. Leclitx, 'Guaranteed to Cure' in *A Scientific Humanist: Studies on Memory of Abraham Sachs*, F. Leclitx, M. del Ellis, P. Gerardi, eds. (Philadelphia: The University Museum, 1980) 262 CHS 14161-5. Recently, Stefan Muhl, in his review of Thomassen's book on Magic, *Welshes Chemie* 49 (1980) 165ff., has suggested that the affliction refers to stopping up the mouth of the drugs representing the victim.

⁴⁶ Now it seems to me that if suffered the same misfortune that once befell Thucydides when he was on trial, he suddenly became paralyzed in his jaw?

οὐκ ἔστιν ἔκτιστο μὴ δοκεῖ πρὸς τὸν
 ὄντα πρὸς τὸν ὄντα καὶ τὸν ὄντα
 ὄντα τὸν ὄντα ὄντα τὸν ὄντα

⁴⁷ All adduced by Christopher A. Faraone, 'An Accusation of Magic in Classical Athens' (*Ar. Wasps* 946-481 = *JMH* 112 (1989), citing from *scholia* to *Ar. Wasps* 946-48, also *Ar. Acharenses* 703-15, cited p. 151; Libanius, cited p. 153.

autobiography (1.245-49) how at one point late in his life he became gravely ill and was no longer able to read, write, or speak before his students, until there was mysteriously discovered in his lecture hall the body of a chameleon, strangely twisted and mutilated: one of its forefeet was missing, and the other was "closing the mouth for silence." Libanius recognized a case of magic, and what concerns us especially here, he interpreted the placing of the chameleon's forefoot upon its mouth as having effected the silencing of his speech. He regained his health, he says, only after the body of the chameleon was removed from the room.⁴⁰

The "seizing of the mouth" in Babylonian magic texts also was designed, no doubt, to bring about the inability to speak, especially to speak in one's defense before the judges.

The witchcraft responsible for such afflictions was performed, as the medical text expressly states, "before" certain stars: according to one diagnosis, a "binding" was "bound" for him before Jupiter on the 21st (or) the 22nd;⁴¹ according to another, "magic [was practiced] against that man on the 4th" of month XI "before" Centaurus,⁴² or "magic was practiced against that man on the nth of month XII 'before' Scorpius,"⁴³ and, with the name of the star broken, "[magic was practiced] against that man 'before' [. . .]."⁴⁴ In another diagnosis only the month name is preserved, not the star's: "[magic was practiced] against that man [on the nth] of month IV 'before'"⁴⁵ This last

⁴⁰ Campbell Bonner, "Witchcraft in the Lecture Room of Libanius," *EMPH* 65 (1932) 341; see also Peter Brown, "Sorcery, Demons, and the Rise of Christianity" in *Witchcraft: Contemporary Accusations*, Mary Douglas, ed. (London: Tavistock, 1976) 29. Especially relevant are the "judicial curse tablets" that attempt to bind the opponent's ability to think clearly and speak effectively in court at an upcoming trial—judicial curses are primarily concerned with the cognitive and verbal faculties which are essential to success in the law courts—(Irvine, "An Accusation of Magic," 156ff.).

⁴¹ and *W. 1* Šul pa-e-ma 1.2121 KAM ma 1.2122 KAM rik-su 'ra-kiy'-su, *ST* 1.892 line 31.

⁴² and *NA* B1.11.712, 1.114 KAM 1G.MU 1 EN-TE-NA BAR-ILUM ip-šu [ep-šu šu] line 50.

⁴³ and *NA* B1.11.712, 1.114 KAM 1G.MU 1 EN-TE-NA BAR-ILUM ip-šu [ep-šu šu] line 50.

⁴⁴ and *NA* B1 and *W. 1* [MU] 1 . . . line 36.

⁴⁵ and *NA* B1 ma 1.71 ŠU 1 . . . line 74.

paragraph may already refer to 'hatred,' which follows as diagnosis in lines 85, 89, and 93. Even such a usually beneficent power as the Wagon (Ursa Major) could be used for nefarious purposes, as an unfortunately fragmentary prescription, from which little survives beyond the phrase "[witchcraft was practiced?] against that man before the Wagon,"⁴⁶⁴ testifies.

What a star has wrought, a star will undo. To counteract the evil magic, one turns again to the stars: materials to be used in the ritual, just as medications (see pp. 48ff.), are to be exposed to stars, as in the instruction: "you expose it to all stars";⁴⁶⁵ two now broken lines must have held similar instructions.⁴⁶⁶

An effluvium from a celestial body may manifest itself not only as "seizure" or "hand";⁴⁶⁷ another image used is "covering" or "clapping down," an image taken from the impact of a net.⁴⁶⁸ For example, a diagnosis states: "The name [of the illness] is 'male fly of . . .,' a wind has swept over him, it is 'covering by Sagittarius,' you may make a prognostication,"⁴⁶⁹ and another, "its name is 'female fly of . . .,' a wind has swept over him, it is 'covering by the Twins,' you may make a prognostication."⁴⁷⁰ The term also occurs in the fragmentary prescriptions "for covering by Star"⁴⁷¹. Unidentified is the disease or symptom called "staff of the Moon."⁴⁷²

The stars are appealed to as individual divine beings whose influence is sought in order to avert the sorcerers' machinations, and it is in the same guise that they are invoked to save from other afflictions, or to achieve a desired goal. Their

⁴⁶⁴ ana LU BI ana pan-šut MAR-šit(DA . . .) I AMT 444 2

⁴⁶⁵ ana LU MU DU' uš-šar line 17

⁴⁶⁶ [. . .] uš-šar line 22 ana LU MU [. . .] line 60

⁴⁶⁷ An illness is called "hand of Venus" in the Neo-Assyrian letter to the king AHf 203 r. 4; see Parpola, *SARS* 2 (1988) 74 n. 4.

⁴⁶⁸ *šupū*, a noun derived from the verb *šp2* 'to cover, overwhelm'.

⁴⁶⁹ *lamsat libati SA LU MU NI šaru šubšuma ših[pti]* (TW BII 586 qiba (DCC) GAI CAR-an. The noun *qiba* 'command, declaration' is the technical term for prognosis, prognostication.

⁴⁷⁰ *lamsat libati SA LU MU NI šaru šubšuma ših[pti] MIAŠ TABBA qib-š CAR-an*, AMT 443 0 4 and BII = BAM 380 in 102 and 22.

⁴⁷¹ ana ših[pti]-šar [. . .] BAM 382 n. 5 and 7.

⁴⁷² *šp2* EN šr 'šp2-LU in *šp2* LU LU MU šp2 'šp2-LU CAR-an-mq 'if (something) like the 'staff of Sin' affects the man', BAM 473 ii 21 dupl 7 [P 192] 35.

influence is not yet connected, as it will be in Hellenistic astrology, with their positions, their "houses," and aspects.

Still, there exist a few texts from Babylonia that seem to be precursors of Greek astrology. Two late, largely parallel, lists from Hellenistic Uruk⁴⁷ enumerate the "regions" or "areas"⁴⁸ of the zodiacal constellations associated with a certain activity which, in order to succeed, has to be carried out in that region. Occasionally an explicit instruction is added: *tip-pušma šallim* "if you carry it out, it will succeed."

It is again the Greek astrological tradition that provides the clue for interpreting the Babylonian references to the signs of the zodiac. What the texts mean when they refer to these signs is the region of the sky where the Moon stands in that particular moment. The Moon's position is considered auspicious or inauspicious for engaging in a specific activity, and these moments have been collected in so-called *Lunaria* (when written in Latin), preserved from the second century A.D. onward,⁴⁹ to which the Babylonian texts represent often very close parallels.

The *lunaria* not only indicate the auspicious moments (with such phrases as *bonum est*, *utile est*) but also the times to be avoided (with such phrases as *malum est* or *noxium est*) when engaging in a specific activity. The Babylonian "Lunarium" includes, e.g., "to bring back a fugitive: region of Regulus, or Libra,"⁵⁰ comparable to finding a fugitive, indicated for several

⁴⁷ BRM 4 19 and 20, edited by A. Ungnad, *Besprechungskunst und Astrologie in Babylonien* (AO 14 (1941) 44: 254-84). More recently, these texts have been studied by Jean Bottéro (1971, *Annuaire* 1974 75-130), reprinted in Jean Bottéro, *Mythes et rites de Babylone* (Geneva-Paris: Slatkine-Champan, 1985), 209ff.

⁴⁸ The term used is the Sumerogram *ki* with the reading *gigzen* "ground, area, region," written syllabically in 1941 1626 rev. 6. It is possible that a better translation would be "place, district."

⁴⁹ The earliest preserved text is the *Πραξιμαγίης* of Maximos, edited by A. Ludwich, Leipzig, 1877, see Paola Radici Colace, *La paratradizione del ΠΡΑΞΙΜΑΓΙΗΣ di Massimo*, *Letteratura e Civiltà Bizantina*, 4 (Messina: Dr. Antonino Stamoni, 1989). For Greek *selenodromia* see the catalogue in Delatte, *Colloq.* 89p. 121, for Latin *Lunaria* see Emanuel Sverberg, *Lunaria et Zodiologia Latina*, *Studia Graeca et Latina Gothoburgensia*, 26 (Göteborg: Elanders Boktryckers, 1983).

⁵⁰ BRM 4 20, 20, see AO 14 (1941) 44: 259 and 265.

days of the *Lunarium of David and Solomon*,⁴⁷ and "to enter the palace (scil., to be well received by the ruler): region of Cancer,"⁴⁸ comparable to "bonum est ire coram rege uel iudice 'good for going before the king or a judge'" indicated for the position of the Moon in Aries.⁴⁹ The hitherto obscure "placing of silver" of the Babylonian texts⁵⁰ can be understood in light of the *lunaria's* "nummos mutuos dare uel accipere 'to give or receive borrowed money'" recommended for the signs Aries, Cancer, Libra, and Capricorn.⁵¹ Success is also sought in love, in business, and in obtaining royal favor, for example "desire:⁵² region of [...]": "to obtain gain for the inn-keeper:⁵³ region of Cancer, variant, Aquarius."

Many of the activities listed describe calamities or diseases in order to indicate the proper time for carrying out apotropaea against them, especially when they were caused by maleficent practices. Such entries are, e.g., "Vertigo:⁵⁴ region of Gemini", and "biting of the mouth: . . ."⁵⁵ (see p. 105); and "reversal of verdict": "cutting the breath": "hatred": and "migraine":⁵⁶ all well known and often listed among the evil machinations of sorcerers.⁵⁷ The acts of black magic by means of which the sorcerer and sorceress sought to achieve their goals include, for example, "to seize a ghost and tie him to a man"⁵⁸ and "to

⁴⁷ A. Delatte, *CC* 46: 10 pp. 122ff. e.g. *desiderare* (p. 122) etc.

⁴⁸ BRM 4 20.12; see also 14 (1941: 44) 259 and 263.

⁴⁹ *Coel. Paris* Nouv. Acq. Lat. 289. XIII s. 1: 23v, 24v in Svenberg, p. 80. 13.

⁵⁰ *lunaria* 449f. BRM 4 20.19 = BRM 4 19.7. Compare the prescription for month II day 13: *lunaria* 449v: "to must not place barley nor silver." *LAG* 178iv. 67.

⁵¹ *Coel. Vat. Pal. Lat.* 834 cited Svenberg, note 475 above, p. 44.

⁵² SA ZIQA 1 = *lunaria* 449. BRM 4 20.45.

⁵³ *lunaria* 449v. BRM 4 20.25 = BRM 4 19.14; see above note 267.

⁵⁴ *lunaria* 449v. BRM 4 20.10.

⁵⁵ KA DIB 30.13A 1 = *lunaria* 449v. BRM 4 20.43 = BRM 4 19.35.

⁵⁶ DIB 30.1A = BRM 4 20.2, with commentary *lunaria* 449v. 55. ZI KA. RU. TA 1 = *lunaria* 449. BRM 4 20.8. 19. 10. 16 = BRM 4 20.22 = BRM 4 19.11, with commentary "to hate" BRM 4 20.66, and SA. 30.1 DIB 33, literally: "biting of the forehead," BRM 4 20.44.

⁵⁷ See note 450.

⁵⁸ *lunaria* 449v. 71. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

the king"¹⁶ and the unfortunately obscure outcome "the (legal) case of" the (or: his) adversary . . ."¹⁷

By determining the propitious time for initiating an activity, the genre represents an early example of the process known as catarchic astrology.¹²

The correspondences drawn between the signs of the zodiac and the performance of the apotropaic or prophylactic rites have a forerunner from a much earlier time. The tablet that records them comes from the site of Sultantepe and is dated to 619 B.C.²⁰ and thus the composition of the text must precede this date. The same catarchic magic that was listed in the late texts is here stated in terms of propitious dates rather than signs of the zodiac.²¹

The most significant difference between the two is the absence in the earlier text of the astronomical data of BRM 4 19.¹⁴ The Sultantepe text goes through the months of the year, singling out the days of the months that are propitious for carrying out the described enterprise.¹⁵ Its recommendations are expressed by the already mentioned formula *tepinimašallim* "if you carry it out, it will succeed" which ends each section. It also includes activities that are now missing or were never included in the late texts, such as, for the first month in its entirety ("from the 1st to the 30th") "desire,"¹⁶ also "for (curing?) migraine and calming desire."¹⁷

4) Our 'MSE' copy is taken with the CAR sign written as the numeral '4') [LAA] kL [HAT] [676rev, 2-14 BR3] 4 29 4x constellation broken

⁴² [] M.L. S.M. opoworiti mistake for M.S. & opoworiti d(m)l(2)-d(l)
d(m)l(2) Kd' cos l(d) d(m)l(2) s | | (d)l(2) d(m)l(2)

For more information, see [13] and above, near 475. See also A. Bouche-Leclercq, *L'Astronomie ancienne*, 1904, reprinted Aalen, Germany, 1974, 476ff.

⁸⁰ Dated by the name of the eponym Bel-ah-u-ur in the colophon.

⁴ I. S. T. 700 published in 1984 in *Unterwasser* (copy by C. R. Curran) who identified it as a duplication of BRM 139 and noted the differences between them. See also Jean-Bottéro 1987, *Annuaire* 1987-88, pp. 180ff. reprinted in Jean-Bottéro, *Mythes et rites* (note 47) about 180ff.

47. Կարգի մեջ եղած քանակները փոխարինելով՝

NT 9007 has a parallel in Egbert von Weither, *Sp712* vol. 2 no. 231, a ritual concerning the activity of *in a* which is also listed in BRM 4 70; see Ugniad, *ib.* 14 (1941-44) 272 and von Weither, *op. cit.* 124.

Wie sich die Zahl der Kinder

⁴⁹⁵ 5.0% to 11.8% (Kane and Uchida 2004, 2005, line 2)

Some entries are applicable to more than one month.⁸⁸ According to rev. 18, days 27, 28, and 29 of every month are (propitious) for (repelling) the demon *SAG.HUL.HA.ZA*, literally: 'who holds the head of evil'.⁸⁹

The medieval *lunaria* that list every day of the month are not much different from the hemerologies that list auspicious and inauspicious days, adding, in the words of Bull and Gündel, only a thin veneer of astrology⁹⁰ over the ancient menologies, and the previously adduced *houaria* or *zodiologia*, which list the twelve zodiacal signs, can similarly be considered offshoots of the ancient menologies.

Such hemerologies and menologies existed in Mesopotamia,⁹¹ both in the redaction in which the days and the months are listed in their calendrical order and marked as either good or bad for initiating certain activities, and in the reverse format, in which the activity is mentioned first, and is followed by the list of the months or days which are recommended for its execution or are to be avoided.⁹² The resemblances to the last section (lines 765-828) of Hesiod's *Works and Days*, even though they are few and superficial, have naturally been noted by the editors of these texts.⁹³

As for the cultic significance of the days and months of the

⁸⁸ Line 14 to months II and III, line 19 to months IV and V, line 24 to months VI and VII, rev. 15 to months X and XI, and rev. 16 and 17 to months XII and XI. (Months VIII and IX are not so combined.)

⁸⁹ For this demon see W. Farber, 'Saghuhharu-mulid (Saghuharu)', *J.A.S.* 64 (1974) 87-92.

⁹⁰ 'Es ist damit nur ein leichter astrologischer Firnil über die alte Tagesabrechnung gestrichen,' Bull-Gündel-Gündel 176.

⁹¹ For texts and discussion see S. Langdon, *Babylonian Menologies and the Sumerian Calendar*, The Schweich Lectures of the British Academy, 1933 (London: Oxford University Press, 1935); René Labat, *Hémérologes et menologies d'Assur* (Paris: Maisonneuve, 1939), and additional texts published by him in *R.A.S.* 18 (1941) 13ff., *APÖ* 5 (1957) 280-345, *sumero* 8 (1952) 17ff., and B. L. Matouš in *Sumo* 17 (1961) 17ff. A new edition of the hemerologies is being prepared by A. Livingstone.

⁹² Among the *lunaria*, too, some are arranged according to the activity recommended or to be avoided, see Bull-Gündel-Gündel 176 listing 'Krankheits-, Trauer-, Adels-, Nahrung-, und Tagesabläufe'.

⁹³ The edition of Hesiod by M. L. West (Oxford University Press, 1978), conversely, notes many parallels with the Assyrian and Babylonian hemerologies and Mesopotamian (Sumerian and Akkadian) literary texts.

year from Sumerian times onward, and for the local calendars of the second millennium, it is only recently that efforts have been underway¹² to enlarge and update Benno Landsberger's early work of 1915,¹³ since he himself never returned to the subject in a second volume as he had promised.

The cuneiform hemerologies list the days that are favorable—in their entirety or in part—in general or for conducting a particular kind of business or activity, either private, such as building a house, taking a wife, or religious, such as addressing prayers and offerings to a god or goddess. The sequence is calendrical by months and days; some texts are laid out in a grid pattern, indicating "favorable" (ŠE) or "unfavorable" (NU, ŠE) in the appropriate column of a table.¹⁴

Some lists give only a selection of the days of the month. The selection always includes the days that are most dangerous, namely the "evil" days 7, 14, 19, 21, 28. Cultically significant days on which prayers and offerings to gods are prescribed are found especially in hemerologies prepared for use by the king, and perhaps exclusively in those. Astral gods to whom prayers and offerings are to be made are conceived in their astral manifestations: stars, constellations, and planets; offerings to the Moon are prescribed for the 15th day, the day of the full moon in the standardized thirty-day month. A hemerological text from Assur which is the most explicit of all¹⁵ prescribes offerings on the 18th of Nisannu (the first month in the calendar) to the Pleiades (ii 45); on the 19th and on X 10 to Orion (Šipazianna, ii 15 and r. ii 48); on III 16 to Marduk, Gula, and Venus (v 44f.); on III 12 and XI 14 to Venus (v 32 and r. ii 53); on IV 18 to the Scorpion (MUL GILTAB, vi 47); and VI 16 and VII 14 to Jupiter (Šulpaē, r. c 50 and r. iv 80).

¹² Mark A. Cohen, *The Cosmic Calendar of the Ancient Near East* (Bethesda, Maryland: CDL Press, 1993); Walther Sallaberger, *Diekalender der III-Zeit: Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie* 7 (Berlin: de Gruyter, 1993).

¹³ Benno Landsberger, *Der cuneiforme Kalender der Babylonier und Assyrer* (Leipziger Semitistische Studien 6.1-2) (Leipzig: Hinrichs, 1915).

¹⁴ Compare the layout of the table at the end of the *Dynasty's Manual* cited p. 90.

¹⁵ KAR 475, edited by René Labat, *Hemerologies et monologies d'Assur* (Paris: Maisonneuve, 1939).

Conversely, on particular days food and sex proscriptions apply, to avoid acts abhorrent to the astral deity. One of the more common proscriptions, that of eating fish and leeks, is on day 7 of month VII³¹ said to be prohibited by "Šulpae, lord of the date grove", as often, the reference is frustrating because a connection between Šulpae, that is, Jupiter, and date groves is not otherwise attested, nor are we told what these two forbidden foodstuffs have to do with Jupiter, even though offering onions is considered sacrilegious in the Greek magical papyri.³²

On the 7th of month VII there is a prohibition for having intercourse with one's wife because "she will despoil him of his virility, it is an abhorrence to the Wagon of the sky of Anu."³³ Again, the relationship between sexual abstinence and the Wagon is not explicit, but the connection between the (celestial) Wagon, Ursa Minor, which often represents Venus, and sexual taboo is readily understandable.

The few late texts concerning the relationship of days of the month and the signs of the zodiac³⁴ presumably reflect Hellenistic speculations. These are the texts for which the term "calendar texts" (German: *Kalendertexte*)³⁵ was coined. Of two re-

³¹ Rowley 19, 35f.

³² E.g., P.M. IV 2584-86, 2630, the fact was noted by Albrecht Dieterich ("Zwischen haben eine besondere Bedeutung") in *Abnayas, Festschrift Hermann Usener* (Leipzig, 1915; reprinted Aalen, Scientia, 1973) 158.

³³ *ma xun ušal u šu la ma u uš u ubbal dkiš uš MAR UD DA ANNA ANNU* KAR 126 r. 6-11. I have supplied the sign *uš* "woman" in the poorly written and transmitted text; the omission of the word and the consequent translation "he must not be in his (own) lap" has given rise to several, to my mind, strong interpretations. The remark "of the sky of Anu" to "Wagon" is presumably added because the text simply says "wagon" (*uš MAR UD DA ANNU*), not "Wagonstar" (*uš uš MAR UD DA ANNU*). For *uš uš MAR UD DA ANNA* Ursa Minor, see the literature cited in W. Horowitz, "The Akkadian Name for Ursa Minor," *ZA* 76 (1966) 242-43.

³⁴ For the late introduction of 30° of the zodiac or 30 degrees as opposed to references to zodiacal constellations see Neugebauer, *HAMA* 593.

³⁵ F. F. Wendner, *Gestirn-Darstellungen auf babylonischen Tontafeln*, Österreichische Akademie der Wissenschaften, Philosophisch-historische Klasse, Sitzungsberichte 264, 2. Abhandlung (Wien: Bohlaus Nachr., 1967). Additional fragments are W. Mayer, *Babylonische Mitteilungen*, Beih. 2 p. 19 nos. 76-79 and W. 20030 133, cited H. Hunger, "Noch ein Kalendertext," *ZA* 64 (1975) 45.

cently published tablets from Uruk that belong to this genre¹²¹ one lists the thirty consecutive days of month IV, the other of month VIII. Each line begins with the name of the month (indicated with the "ditto"-sign from line 2 on) and the number of the day. These two entries are followed by another pair of entries, also designating a month and day, in which the month is expressed, as elsewhere, by the name of the corresponding zodiacal sign, and the day by the number referring to the degree in the sign. From one line to the next the second pair increases by nine signs plus seven degrees ($9 \times 30 + 7$) yielding the number 277. Since no astronomical significance for this number can be found, it has been suggested, among other speculations, that it refers to the number of days in a gestation period. In the first text (no. 104) the sequence begins with I 7 (Aries 7°) for day one, continuing with X 14 (Capricorn 14°) for day two, etc.¹²²

Typical of "Calendar texts" is the association of zodiacal signs with a tree, a stone, an herb, and various other items. Sources come from Seleucid Uruk¹²³ and their relationship with Hellenistic texts is shown by the fact that they assign the same entities to the signs of the zodiac – or rather, of a micro-

¹²¹ Egbert von Weiher, *SpU*, vol. 3 nos. 104 (month IV) and 105 (month VIII).

¹²² Not all the designations of the zodiacal signs are the standard ones used in astronomical texts. Both texts (nos. 104 and 105) use the month names BAK (month II instead of U) and ZIL (X for Aries) and SE (month IV) instead of A/LA for Cancer (VI). Moreover the sign I (Taurus) is replaced by AR (ARU) Pleiades (II), MAS MAS Gemini (by SIKY Orion) (III), and I DUL Field (= Square of Pegasus) (VII) instead of ZIL (Pisces) (XII). Both texts also use the abbreviated names GUR (= GUR.MU) for Scorpius, SIKY (= SIKY.ZI AN.NA) for Orion (standing for Gemini), DUL (= DUL.BE) for Sagittarius, SUTUR (= SUTUR.MAS) for Capricorn. However, according to the catch line of no. 104, the next tablet of the set, dealing with month V, again designates Taurus, as usual, by GUL (Bull).

¹²³ Published in cuneiform copy by F. Thureau-Dangin (1911: 6–12) and edited along with another fragment, now in Berlin, of the same tablet (see figs. 3–5) by E. Weidner in *Eastern-Semitic Languages and Babylonian Literature* (note 320 above). Included in Weidner's publication is a tablet now in the British Museum, which is catalogued among the Kayumuk collection, but most likely also comes from late Babylonian Uruk. Landsberger drew attention to it as early as 1915 in *Der kaldische Kalender der Babylonier und Assyrer* (note 513 above) 145ff.

zodiac⁵² in which each sign is divided into twelve units of $2\frac{1}{2}$ degrees each – as do the Cyranides,⁵³ as I discuss in Chapter VII. The above-described Uruk texts assign to each of the calendar dates an ointment whose ingredients are related to the zodiacal sign by a pun, either linguistic or purely orthographic, on the name of the sign. Thus, the text prescribes as ointment the following ingredients:

For the first month, corresponding to the zodiacal sign Aries 'Ram,' the ingredients are blood, tallow, and wool from a sheep; for month II, corresponding to the zodiacal sign Taurus 'Bull,' here designated by one of its conspicuous constellations, the Pleiades, they are blood, fat, or hair of a bull; for month III, corresponding to the zodiacal sign Gemini, here, as in the similarly late text cited on p. 20, designated by the name of the constellation Orion – they are to contain the head, blood, and feather of a rooster;⁵⁴ for month IV, corresponding to the zodiacal sign Cancer 'Crab,' the blood and fat of a crab; for month V, corresponding to the zodiacal sign Leo 'Lion,' blood, tallow, or hair from a lion; for month VI, corresponding to the zodiacal sign Virgo 'Furrow,'⁵⁵ flour made of *šigāšir*-barley, the head and feather of a raven; for month VII, corresponding to the zodiacal sign Libra 'Scales,' . . .⁵⁶ for month VIII, corresponding to the zodiacal sign Scorpius 'Scorpion' . . .; for month IX, corresponding to the zodiacal sign Sagittarius, here designated by the name of the god Tabilsag, the head, feather, and blood of the auzi-bird; for month X, corresponding to the zodiacal sign Capricorn, blood, fat, and hair of a goat; for month XI, corresponding to the zodiacal sign Aquarius,⁵⁷ the

⁵² For the meso-zodiac see A. Sachs, *JCS* 17 (1962) 71.

⁵³ For recent literature see David Rein, *Isis* 11 (1991).

⁵⁴ Written *IMIR-MUŠEN*, which elsewhere corresponds to Akkadian *imidi* 'trapezoid' but which here must be an abbreviation for *IMIR-ILU-AI-MUŠEN* – i.e. literally 'Rooster' – part of the constellation Uanis Minor.

The name of the constellation is written, as usual in late texts, with the signs *KI-DIM* that have no known etymology, unless they stand for Akkadian *šarānūšir*, literally 'secret place,' a term designating the sign in which a planet reaches its exaltation (Greek *hypsoma*). The constellation Raven (*Corymbus*) has its heliacal rising in month VI; compare the text cited p. 28.

⁵⁵ The entry is, here and in the next month, the unintelligible *KI-KAI-lim*.

⁵⁶ The name of the constellation, written *el*, abbreviated from its Sumerogram *GUŠA*, does not seem to be connected with the word for 'eagle.'

head, feather, and blood of an eagle, for month XII, corresponding to the zodiacal sign *Pisces*, here designated by 'Field,' the name for the Square of Pegasus, the head and blood (variant: heart) of a dove, the head and blood of a swallow.

The late origin of the text is also evident from the fact that the punning relationship between the prescription and the corresponding sign of the zodiac can be understood only with reference to the classical zodiac. For example, the recipe prescribed for the first month is prepared from a sheep although the expected zodiacal sign, Aries 'ram' is not mentioned nor is the Akkadian name of the sign, *Agru* 'hired man,' associated with "sheep": MUL.LU, MUL.LU, or simply LU with the meaning "Aries" is well attested in Seleucid texts.¹¹ Note also that the prescription for the second month requires the blood, fat, or hair of a bull, but the month is identified by the constellation MUL.MUL 'Stars,' i.e., the Pleiades, used in late texts instead of the name GUD 'Bull' of the zodiacal sign.

I am not able to solve the problem posed by the unintelligible KI.KAL *tin* prescribed for months VII and VIII, the signs Libra and Scorpius. However, although less transparent, the connection between the birds that provide materials for the ointments and the month or sign for which these are prescribed, can be astronomically justified.¹² Thus month III, Gemini, designated by Orion, is connected with the Rooster, a part of Canis Minor; month VI appropriately with the Raven (*Corvus*), month XI, Aquarius, with the Eagle (*Aquila*), and month XII, *Pisces*, with the Swallow, a name for the western fish of *Pisces*. Since the identification of the *andû*-bird is not certain, its connection with month IX, Sagittarius, cannot be argued.

Heads and feathers of various birds indeed appear as ingredients in various Mesopotamian recipes, both magic and medical, just as they do in medieval magic texts. Among twelve recipes against a disease¹³ – its name is broken on the tablet –

¹¹ See A. Sachs, *JCS* 6 (1952) 714 ad E.C. 6.14.6.20. Among various theories for the origin of the writing LU, the association of LU (a cuneiform sign that may also be read LU, 'sheep') with the zodiacal sign Aries 'ram' was also discussed by Ungnad, *Abh.* 14 (1941) 44.256 n. 37.

¹² Following a suggestion of David Pingree.

¹³ *BM 4751.26*, in line 27 an enumeration of medicines for *SUGUMMA* 'hand-of-the-ghost' begins.

CHAPTER VII

The Nature of Stones

*Ingenis est herbas vitas dala maxima gemmas.*⁷

𐎶𐎵𐎶𐎵 𐎶𐎵 𐎶𐎵𐎶𐎵; 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵

(*Clapham's Herbarium* 411)

Zacharias of Ratschen, in the volumes which he dedicates to King Melchisedek, attributes rivers destiny to the influence of poisonous stones.

(*Pliny* 3.11.37.169)

Human-headed bulls and other stone colossi guarded, as it is well known, the gates of Assyrian palaces. Their apotropaic function is sometimes inherent in their names already, as that of the guardian figure called *aladlammû* (from the two Sumerian words *alad* and *lamma*, both designating protective spirits), the name of another, *apsasita*, reflects its shape (from the word for cow, Sumerian *ab*). Both these learned loanwords were coined, along with many others, during the renaissance of learning under the Sarganid kings.

The palace of Alcimus too was guarded, as we know from the *Odyssey*, by apotropaic dogs of gold and silver, fashioned for the Phaeacian king by Hephaestus the Magician.⁸⁰ But only the Assyrian king Isarbaddon explains how the guardians fulfilled their function: they were made of the stone *ŠE-TIR* "repelling the evil one according to their *šiknu*."⁸¹ The available, usual translation of this word *šiknu* as 'form' (in the

⁷ John M. Riddle, *Medieval Riddles* (1125-1125), *The Lapidary*, Prologus, line 21, (Scribner's Archive, Bethel, 2000; Westwood, 1977), p. 34.

⁸⁰ Christopher A. Faraone, "Hephaestus the Magician and Near Eastern Parallels for Alcimus' Watchdogs," *Greek, Roman, and Byzantine Studies* 28 (1987) 237-80. A revised version is found in Christopher A. Faraone, *Talismans and Talismanic Horses* (Oxford University Press, 1992), 18-35, Chapter 2, "Beastly Guardians at the Gate."

⁸¹ *aladlammû apsasita ša šar, ŠE-TIR ša šar šiknu-m-šar-mu ura lemmu utarru*, Berger, *Israh*, p. n1 §27, Episode 22, A vi 15-16.

alternative translation "which by virtue of their form ward off evil" of the above phrase) seemed to indicate to Faraone, in his comparison of Greek and Near Eastern apotropaic statues, that the Assyrian king attributed the operative force of the statues to their form alone. We have seen, however, that in reference to the handbooks describing herbs or stones a more appropriate translation of the word *šiknu* would be 'nature.' A translation 'nature' also vindicates Faraone's suggestion that "the medium could also be an important factor." His suggestion was based on an inscription of Sennacherib who boasts of having had protective colossal statues⁵⁶ fashioned from that same stone *ŠE-IR*,⁵⁷ which, as the old translation had it, "was normally used only for making neck amulets."⁵⁸ Unfortunately, Sennacherib does not say exactly this. Rather, as the more up-to-date translation has it, he identifies "the *pundi* stone which at the time of my forefathers was (considered) too precious to be (worn) around the neck."⁵⁹ Still, as Faraone had surmised, it is the material, the substance, the nature of the stone - its *šiknu* - that gives it its power, a power described in the handbook called, after its incipit *abnu šikinšu* 'the nature of the stone is.' Of the entries of this handbook, which has survived only in fragmentary state,⁶⁰ some preserve the description of the stone or mineral, and others also the purpose for which it is suited. For example:

⁵⁶ For the human-headed lion colossal (terrazzo) made of *ŠE-IR* see H. D. Giffert, I. D. Levine and I. J. Reade, *ABRAM* 4 (1986) 11, sub no. 20.

⁵⁷ The Akkadian name is possibly *pundi* or *puṇḍi*, and not as previously thought *puṇḍi*.

⁵⁸ *Šikinšu* stone, whose beautiful structure had the appearance of cucumber-seeds, and was highly prized for necklaces (*gir* - stones of the neck), or amulets to bring on rain (to - stone for countering rain) and bringing on rain, and to keep disease from approaching a man. D. D. Luckenbill, *Ancient Records of Assyria and Babylonia* (Chicago: University of Chicago Press, 1927), vol. 2, no. 430.

⁵⁹ *ṣipḫa abnu šikinšu laṣṣaru*, OH 2 427 d 5, in CAD K p. 449 *šikinšu* meaning 2b.

⁶⁰ The surviving fragments are: J.T. 106, ST 109, RASM 194, RASM 378, K 4751 (for these, see B. Landsberger, *JCS* 21 (1967, published 1969) 151 n. 64, and BM 50664, the latter two are edited, with some comments on the series, by Wayne Horowitz, "Two *Abnu šikinšu* Fragments and Related Matters," *ZA* 82 (1992) 112-21.

THE NATURE OF STONES

the such-and-such stone is for appeasing divine anger;
the such-and-such stone is for entering the palace—namely, to be
received with favor by the ruler."¹¹
The such-and-such stone is to prevent migraine;
the such-and-such stone which has a greenish tinge is to assure
that the god be favorable to the man, and so on.¹²

Descriptions that appear only in the Assyrian kings' narratives probably are citations from this work, as that of the *gim-lilibi* stone, which protects one from plague,¹¹ or of the *elallu* stone, which serves to obtain obedience,¹² while that of the SE IR-stone "which ensures obedience and averts destruction"¹³ may be compared with "the stone for averting destruction," attested in a list of amulet-stones.¹⁴ The 'nature' of the SE IR-stone itself does not happen to be preserved in the Stone-book, and many of the Stone-book's descriptions leave the modern reader perplexed and, as so often, with his curiosity unsatisfied. Take the entry, "the stone whose nature is like fish eye is called 'fish-eye'," no more informative though more picturesque is the description of, for example, the stone *arzallu* as "the stone whose nature is like a stork's wing" or the stone *abīšmū* called "stone of sunset",¹⁵ another stone (or possibly the same – the name is not preserved) is called "stone

⁵⁰ Two parallel texts sum up a list of 77 *domes* as 77 *domes* (4b, 11) (text), but in another *salma* has 77 *domes* for entering the palace and not be confronted with calamity. BM 56148 n 12: *dupl: to dāktālmān⁵¹ sūm* (\in B1 + Walker).

The text is published as *l. 34* in the list on the left side of the tablet, that is, either on the first column of the obverse or the last column of the reverse. The bottom of the tablet is not preserved, so that the purpose of the enumeration is not apparent. Neither are the beginnings of the lines preserved, so that the manner of the stone with which the line began is missing, to compound the uncertainty caused by the break at the left margin; it is also otherwise impossible to tell whether a line is a new entry or whether it continues the preceding line. The text belongs possibly to the *al-makān* series. Similar are the texts *BM 113* and *144*, as noted by Koebel, *BM 113*, p. xiii. Compare also Egbert von Winter, *Syll.* vol. 4, no. 128.

¹¹ SA, *perimihibü* = SA, N AM BAI ana amehi la tché *Archaeology* 74 pl. 52 no. 122 N. v. M. S. cited C. A. P. E. p. 74 v. citée A. usage p.

12. *See, e.g.,* *Blalock v. Blalock*, 425 U.S. 213, 218 (1975) (Burger, J., with 50% owned child).

Abstracts appear in Russian in *Uchenye Zapiski Kazanskogo Universiteta* 4 (1961) 2: 132-73 (Sennichayevskiy).

— 363. 11554 400:1000 23 3 31 24% 2

¹¹ SAT 108.75 and dupl. 84.33 378 is 174.

of sunrise.¹⁶⁷ Would that we had the lapidary of Zacharias of Babylon!¹⁶⁸

A place of special interest was allotted to the magnetite, Sumerian KA.GI.NA.DIB.BA, a compound translated into Akkadian as *šadānu* (KA.GI.NA) with an epithet written DIB.BA that may be read *šibtu* or *šidtu*. Since the reading of the Sumerogram DIB.BA is ambiguous, the epithet either describes the magnetic attraction of the stone, *šibtu* 'capturing,' or alludes to the magnetite captured, along with a cohort of rebellious stones, by the god Ninurta in the Sumerian mythological epic tale *Lugale*:¹⁶⁹ *šibtu* 'captive'. Akkadian *šadānu* most likely simply refers to the ore's '(coming) from the mountain'¹⁷⁰ but the explanation of the corresponding Sumerogram KA.GI.NA as 'speaking the truth' is probably just popular etymology, based on the possible translation *dabūtu* 'to speak' of its component KA, and the translation *liru* 'true' or *littu* 'truth' of its component GI.NA; the stone therefore is given the antilogy 'the stone of truthfulness, he who wears it shall speak the truth, only a pious man may wear it'.¹⁷¹ This function of 'the stone of truthfulness' evokes of course Pliny's statement that possession of the haematite reveals treacherous designs on the part of the barbarians.¹⁷²

Reference to the "Babylonian Stone-book" is made in a Neo-Babylonian list of stones¹⁷³ which culls stone names, both Sumerian and Akkadian, from the standard lexical list *HAR-ra* = *hubullu* without apparent order. It ends with a colophon

¹⁶⁷ STT 100-71.

¹⁶⁸ Pliny, NH 37.169, quoted in the motto to this chapter; see Robert Halleux and Jacques Schamp, *Les Lapidaires grecs* (Paris: Les Belles Lettres, 1983) xvii and 320.

¹⁶⁹ E. van Dijk, *Urukki: Urukki ME 1-AM be NINURTA* (Le royaume et le destin de Ninurta: du Déluge et de la Nouvelle Création) (Leiden: Brill, 1987).

¹⁷⁰ From Akkadian *šadū* 'mountain'. See A. A. Barb, Tapis Adamas, Der Blutstein, in *Hommages à Marcel Renard*, vol. 1, Coll. Latomus 101 (Brussels, 1964) 609-6 for the suggestion that the word recurs in Greek as ορείτης, and that Greek *lupatogon* ορειγεν reflects Akkadian *šadānu* *šadū*.

¹⁷¹ EAM 194A.11.4.

¹⁷² Pliny, NH 37.80, as cited in R. Campbell Thompson, *DAUG* 86.

¹⁷³ Published in MSL 10.65-68.

comprising a subscript and a catch line;⁵⁵ (the series) *abnu šikīnu* for learning about stones⁵⁶ followed by the equation NA₁ KA₁ AG - *šu-u*, [a]š-*šu-u*, the catch line⁵⁷ to the stone section of the pharmaceutical series *Uranna*.⁵⁸ The same catch line also appears at the end of Tablet VIII of the synonym list *maliku* = *šarzu*,⁵⁹ showing that the sequel to this synonym list was the stone list, or a particular recension of it.⁶⁰

Besides the handbooks, there exist shorter lists of herbs alone, stones alone, or of a combination of herbs, stones, shells, and various other *material medica-medica*, these are usually written on narrow tablets,⁶¹ whose shape itself is reminiscent of the lamellae made of lead or other metals.

Certain Akkadian stone names have been adduced to explain Arabic and Greek counterparts.⁶² The fame of stones' magical properties and the etiological explanations pertaining to them have spread beyond Babylonia. The best known of these is the *adites* or 'eagle-stone'. Its name in Akkadian is *abnu erī* (or its phonetic variant *abnu arī*), of which the second element, *erī* or *arī*, is both the word for eagle and the infinitive of the verb 'to be pregnant'. It is in the bilingual Sumerian and Akkadian lists that we find the "basic" meaning, or at least the

⁵⁵ vi 17-20.

⁵⁶ [ix 55] *abnu šikīnu* [ix 55] *ana lamadu*.

⁵⁷ NA₁ KA₁ AG - *šu-u*, NA₁ *šu-u*, K 427 + 1 in CT 14 17 c - *Uranna* III 143.

⁵⁸ The stone section, with its entries preceded by the determinative NA₁ 'stone', follows the herb section, whose entries begin with the determinative U 'herb' or U₂ 'tree'. They are usually separated by a ruling (in Kocher, *Pharmakopoe* 12 n. 39-40 and Kocher, *Pharmakopoe* 14 = CT 14 10 n. 18-19). One source (K 4419 in CT 14 43) ends with the plant section, and has a subscript [] - [NA₁ ME₂], which Kocher suggests to restore [arkīnu] NA₁ ME₂ 'there follows the stones'.

⁵⁹ *Maliku* VIII 176.

⁶⁰ For concatenating various series, see Chapter V (p. 90).

⁶¹ E.g. BM 255 or LBT 4 nos. 148-51, mentioned in his review of the volume by A. Leo Oppenheim, *ils* 4 (1950) 1602, and especially René Labat, 'Ordonnances médicales ou magiques', RA 54 (1950) 169-76, with RA 55 (1960) 95; such texts are mentioned in Jean Boissier, *l'off.*, Annuaire 1974-75 p. 110, who is quoted by Kocher, RA 55 p. xi note 4.

⁶² See Paul Kraus, *liber de Hauser*, vol. 2, *Mémoires de l'Institut d'Égypte*, 45 (Cairo, 1942) 72n. (citing Akkadian stone names after R. Campbell Thompson, 114 G).

meaning that was considered primary: the Sumerian name of the stone is *na-pes* 'stone for pregnancy.' Nevertheless, in Akkadian context, the name of the stone is often written, in rebus writing, with the Sumerogram NA.A.MUŠEN, that is, NA = *ahum* 'stone (of)'; A MUŠEN 'eagle-bird' = *eril*. It is of course the homonymy of 'pregnant' and 'eagle' and the use of the logogram of the latter word for the former, that gave rise to the fable about the stone to be found in the nest of the eagle, brought by the eagle from India or other far-away places,¹⁰ or, according to other sources, found in the head of a fish called 'eagle,'¹¹ to serve as amulet for pregnant women.¹²

The claim that stones have such beneficial properties was ridiculed by Pliny the Elder when he wrote in his *Natural History* in the first century A.D.: "Zacharias of Babylon, in the volumes which he dedicates to King Mithridates, attributes man's destiny to the influence of precious stones, and as for the 'haematina' [a stone discussed by Pliny earlier], he is not content to credit it with curing diseases of the eyes and liver, but places it even in the hands of petitioners to the king,¹³ allows it to interfere in lawsuits and trials, and proclaims also that to be smeared with an ointment containing it is beneficial in battle."¹⁴

Beads made of semi-precious stones, shells, and other colored stones (some of which are probably colored glasses¹⁵) are supposed to protect from evils wrought by demons or witches. Even though in some of the Assyriological literature they are called "amulet stones," this designation may be misleading, as our own associations with the word "amulet" are

¹⁰ See R.A.C. I (1950) 94 ss. "Adlerstein."

¹¹ Karamides, cited Barb. *WZ* I 13 (1950) 707 n. 8.

¹² "In der Literatur wird ein Stein erwähnt, der den Mutterleib mit dem darin befindlichen Embryo durch ein ins Innere befindliches kleineres Steinchen hindurch zu dem Mutterleib bringt." (P. 115) "Natürlich wollte sich die Trägerin dadurch vor Fehlgeburst sichern." L. Ubeling, *BJA* I (1928) 121 ss. "Agostropagen." See also R. Halleux, *Les amulettes-grosses-trois* 559 (above) 361, n. 4 with previous literature. A. A. Barb. "The eagle-stone" (1951) 13 (1950) 316-18 has noted this pun, interpreting the hesitant suggestion of R. Campbell-Thompson (1907) 305.

¹³ Compare the stone "for entering the palace" cited earlier.

¹⁴ Pliny, *NH* 37.169.

¹⁵ A. L. S. Oppenheim, *Glass and glassmaking in Ancient Mesopotamia* (Corning, NY: The Corning Museum of Glass, 1970) 9ff.

different and, moreover, modern authors use the term "amulet" to refer to a variety of things.⁷⁰ In fact, the Latin word *amuletum* from which "amulet" is borrowed has no known etymology,⁷¹ and when Greek and Latin texts speak of using such stones and other materials for protection, they simply prescribe "tying them on" as in Latin (*adalligare*, Greek *kathaptein* or *peraptein*). It is exactly the same phrase, 'to tie on,' that is used in Akkadian to describe wearing such phylacteries.⁷²

Amulets are used mostly not singly, but on a string. Such a string of beads (Akkadian *turtu*) is made up of various stones strung on a cord of colored—red, white, black, or multicolored—wood to be worn as charms around the neck, on the right or left wrist, or the right or left ankle. Other charms—amulet stones—may be placed on the chest or the abdomen. A particularly well known example from Hellenistic and medieval magic texts and lapidaries is the charm used to make a woman talk, a phrase that recurs verbatim in a Babylonian magic text.⁷³ It is only the Hellenistic lapidary that says that by placing the preparation on the sleeping woman's bosom (Greek: *pusche*, a term used for *pudenda*), she will be induced to talk. It is, however, a medieval text that tells us that if you place the stone from the nest of an owl [*la huppe & upupe*] on the bosom of the sleeping woman, she will babble out in her sleep if she has a lover.⁷⁴

Prescriptions for various ills include long lists of such beads,

⁷⁰ E.g., Beatrice J. Coul, 'The Role of Amulets in Mesopotamian Ritual Texts,' *JNES* 19 (1960): 1–30.

⁷¹ According to A. Ernout and A. Meillet, *Dictionnaire étymologique de la langue latine* (1965) 54–55, while others have proposed that it derives from Greek *amuletus* (a stretch, reinterpreted by folk-etymology as *amuletationem* 'phylactery'; cf. Walde, *Latinsches etymologisches Wörterbuch*, n. 551).

⁷² The Hebrew term *amulet* also means 'Angel-binders'; see Strack, *Billerbeck*, vol. 4, p. 529.

⁷³ Reiner, 'Nisnamai Talk,' in *Engering over Words: Studies in Ancient Near Eastern Literature and Thought*, ed. William L. Moran (Tav. Abusch et al., eds., Harvard Semitic Studies, 7; Atlanta: Scholars Press, 1980) 421–24.

⁷⁴ *Ancherum cavense*, 65, p. 647 (Pina; *Ancheta Sacra II*, from Evax lapidary, cited Hallex, *Studi medievali* 3, 45 (1974) 332, and newly edited in Hallex, *Lapidary* (note 559 above) 280, 333 and 342. For literature (Pina, Dabigeron, and the similar böcklein German and French folklore) 'Aberglaube' [p. see also Max Wellmann, *Metallus von mag. als Art und die Amulette der Hermes-Fröhenstas*, *Philologus*, Supplementband 27, 2 (Leipzig: Dieterich, 1934) 71 and nn. 26, 29.

sometimes enumerated in sets for each such string; the lists end by stating the purpose of the string (*turnu*), or simply of the group of "stones" (Akkadian *abnu*, usually expressed with the Sumerogram *NA*) and the manner of application. For example, a small tablet enumerates eleven beads, and summarizes them as "eleven stones for blurred vision,"⁶⁴ to string on red wool, you wrap wolf-bane on seven rolls (*ippi*) of blue wool, while you recite a charm, and tie it on his left hand.⁶⁵ To cure a hemorrhaging woman you string on red wool various stones, recite the appropriate magic spell, and tie the string around her waist; ⁶⁶ another string for the same purpose is to be strung on the tendon of a dead cow or dead sheep, with fourteen—that is, twice seven—knots tied between the beads.⁶⁷

Not all the items are precious or semi-precious stones, or even stones at all. Among the "stones" enumerated there appear beads made of a metal, either of the precious metals silver and gold, or of others, such as copper, iron, or tin, and beads of various minerals such as antimon, and even shells, all of which are normally written by means of their Sumerograms, with initial *NA*, 'stone'.

Specifications added to names of stones are rare, except for the qualification "male" or "female" mentioned earlier in connection with the sex of herbs (chapter II). Male and female varieties of stones are known from Classical texts⁶⁸ and from late antiquity; for example, it is said of the topaz that "it is green, . . . hard, compact, transparent. This is the male variety. The female variety is lighter."⁶⁹ Male and female stones are named not only in magic texts⁷⁰ and in the stone lists,⁷¹ but they are so classified in the "Glass texts," the Assyrian prescriptions for

⁶⁴ Akkadian: *burat nu*.

⁶⁵ HAM 251, also 352.

⁶⁶ HAM 257.

⁶⁷ HAM 257, 10-14.

⁶⁸ E.g., Pliny, *NH* 16.39, 37.139, 48. R. Halleux, "Fécondité des mines et sexualité des pierres dans l'antiquité grecque-romaine," *RHPh* 48 (1970) 16-25 and *Lapidaires* (note 359 above) 326.

⁶⁹ Orphic *libica keragosa* 86, 87-88; (see 1080-1082) 1081-82 à décrire, à 86, 87, 88; 89-90; 91-92; cited Halleux, *Lapidaires* (note 359 above) 151.

⁷⁰ E.g., 7 NA, Su-G, Su-A, *RA* 31 473 m 22.

⁷¹ 5 NA, 1-10; 5 NA and 5 NA, 1-10; 5 NA, in the *abnu-dur-mu* text K.4791:5-6, see ZA 82 (1992) 117.

producing colored glasses, which speak of male and female trit."² Among the rare descriptions of natural markings, one refers to a variety of *aspi*-stone as *sa uskara kallumu* 'which shows a (moon?) crescent,'³ and some shells are often specified as having seven spots.⁴

In contradistinction to the amulet of antiquity, which according to one definition is "a stone of inherent supernatural powers that may be engraved and/or consecrated, and that is either used as a seal or worn as a phylactery" and to the talisman, which is "an image either made of metal in the round or engraved on a metal plate, over which image a ceremony of incantations and sutumigations is performed in order to induce a spirit to enter the talisman and to endow it with power,"⁵ the Babylonian "stone" bears no engraving or image. The images and engravings on Babylonian cylinder seals have a different origin and anthology, even though of course some seals may have been worn as amulets,⁶ and even though the particular stone that serves as material for a cylinder seal is said to determine the fate of the person who wears such a seal in the omens appended to one exemplar of the *abnu šikinū* series.⁷ Nor does the Babylonian string of stones

² *Lamzabhu-lu-tes* (Jup. 517, A 45) Oppenheim, *Gold and Conquest* in Ancient Mesopotamia (quoting also 48 fragm. c 620, see ibid. 48).

³ See E. Reiner, *DeS. 30* (1967) (p. 106) note 2, with note 21, a further allusion is 5A, 27 (cylinder seal impression) von Weiser, *SpTU* vol. 2 no. 22 in 32.

⁴ *asartuša 7 ukpasa* (Egbert von Weiser, *SpTU* vol. 2 no. 22 & 39 and other references cited) 310 Text 30a, for the reading, see Landsberger, *B. S. 21* (1967) published (1969) 17.

⁵ David Pingree, "Astronomy," in *Dictionary of the History of Ideas*, vol. 1 (New York: Scribner, 1973) 18-26; see also E. S. Margines, *Septem apellat telam quod interpretatur uolens spea quinquid facit ymago per uolens uolens facit*. "Sunt compositae opportuno pro-priis ad implendum predicta, et hoc in temporibus opportunis, et sutumigamentis quibus totum antea attra huntur spiritus ad ipsas ymagines." (Pingree, *Idem* [1973] 19).

⁶ For the question of representation on and the function of seals see the works of Edith Porada, for example "The Iconography of Death in Mesopotamia in the Early Second Millennium B.C." in *Death in Mesopotamia*, B. Alder, ed., Mesopotamian Studies (Copenhagen: Akademisk Forlag, 1980) 250-73. See also the article by B. Alder cited n. 370.

⁷ B. 3.11.194 viii. The text formerly published as A 18, 1851 has been added by B. Carr (note 579) also viii, but was interpreted as referring to purports from a particular cylinder seal rather than referring to the wearer of such a seal.

normally undergo a ceremony of consecration by which a spirit is induced to enter it and to endow it with power. The power sought to imbue the string or the individual stones is that coming from the stars; for this reason they must be exposed to irradiation by stars.

In a recently published ritual enumerating the proper amulet stones to be used in various predicaments⁷⁰ such an exposition to the Goat star is recommended against the evil machinations of an "ill-wisher" or, as the term *bēl-temitti* may also be translated, "adversary." Other strings listed in the same text, but without specifically prescribed nocturnal exposition, protect from such physical ailments as diseases of the eye,⁷¹ but also from harm brought about by enemies, ill-wishers, divine anger,⁷² and sorcery.⁷³ The ritual to protect the client from the disastrous consequences (described in lines 8-16) brought about by an "ill-wisher" begins with column ii line 8.⁷⁴ It is divided in two parts: the first section of seven lines (ii 17-23) enumerates seven phylacteries, one in each line, containing two herbs and one stone each, while the next section goes – without a ruling – from the enumeration of stones to the exposition to the Goat star (the star of Gula) and the prayer to Gula, beginning in ii 24 and ending in iii 2, for a total of thirty lines.⁷⁵ This last section begins with a list of twelve stones – as a matter of fact, when you count them there are thirteen – and many of them cannot be identified:

Carnelian, lapis lazuli, yellow obsidian, *mekku*, *egzangū*, *pappardū*, *pappazimū*, *lapis*, *ammon*, jasper, magnetite, *tuamurū*, *abakurū*.
 Twelve(s) stones (to use) if a man has an "ill-wisher." You string

⁷⁰ Egbert von Weizer, *SBOT*, vol. 2 no. 22. An excerpt tablet that duplicate lines 16-25 is published by M. J. Geller, *JNES* 35 (1986): 241. Note [x] BE XAM-AB-SUM-*l* 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

⁷¹ *ibid.*, i 5-15.

⁷² i 16-25, ii 8-16, etc.

⁷³ i 39-46.

⁷⁴ A ruling after line 7 of column ii introduces a section that runs until column iii line 32, at which point other rituals begin.

⁷⁵ Thirty and not thirty-one, since line 32 is a *rest* from line 31.

the stones and phylacteries on a [linen] thread], you set in place a holy-water vessel, you purify the stones and the phylacteries, you place the stones before the Goat star, you set up a censor with aromatics, you libate beer, (you recite) the incantation:

"O Bright one, let your angry heart be appeased,
let your innermost relent, O Gula, exalted Lady.
You are the one who created mankind, who bestows lots, food
portions, and food offerings."
be present at my lawsuit: let me obtain justice through your verdict,
because of the sorceries, spittle and spatter, evil machinations
of my adversary: let his evil doings turn back against him and affect
his head and his body;
and I, your weary servant, will sing your praises.

How stones acquired their renown for protecting from evil and granting success to an enterprise is not known; however, there is a tradition about strings of amulet stones harking back to a famous king of the past. Some are attributed to Hanimurapi, Narām-sin, and Rim-sin, just as some "proven salves" bear the name of Hammurapi.⁶⁶ A list enumerating fourteen amulet stones, to which several duplicates exist, has as subscript "14 stones of the necklace of Narām-sin,"⁶⁷ while variants to it attribute the necklace to King Rim-sin.

⁶⁶ The first four signs *u ša an-ur* are unintelligible to me. They seem to stand for a first or third person past tense of the verb *anur* 'to repeat, to change,' or possibly may have to do with *an-ur* or *an-gar-an-ur*, with the ending *-an* that could represent a first person dative.

⁶⁷ Compare the address to the Wagon star in 5/3 73 (see p. 71).

⁶⁸ For salves attributed to a famous king of the past, see Chapter II p. 41 and n. 170.

⁶⁹ 14 NA. M. S. 6.2: "Na-ram-'Sin, BAM 372 n. 5. [14 G. Na-ram-'Sin, BAM 357 5, 14 NA. M. S. 6.4: "Na-ra-'im-'Sin, BAM 375 R 42. 14 G. "Na-ir-'am-'Sin, BAM 376 n. 8, 3. [M. S. 6.1. 1. BAM 368 n. 9. see also for K 2499+ n. 24. K 6282+ n. 14. Kocher, BAM IV, p. 35 and no. 357, and Kocher, "Ein verkappter neubabylonischer Text aus Sippar," JOT 20 (1963) 157ff. Note, however, that not all names written AM-'Sin are to be emended to Narām-Sin, since AM as sunietogram can stand for the Akkadian word *gallu* 'wild bull,' and hence, the spelling can refer to King Rim-Sin of Larsa, as in, e.g., G. AM-'Sin in AM 74 r. 18. See Talvik, *Studies in Honor of Benno Landsberger on His Seventy-fifth Birthday*, April 21, 1965, AS 16 (Chicago: University of Chicago Press, 1965) 352, now confirmed by the recently published text CT 51 89, which writes G. AM-'Sin G. LAM-Larsam (CT 51 89: 11) in 115, as I pointed out in "Magic Figurines, Amulets and Talismans," in *Monsters and Demons in the Ancient and Medieval Worlds: Papers Presented in Honor*

The date of composition of the Stone-book is not known, but it probably is to be placed around the turn, or at the beginning of the first millennium, when much of the speculative literature and *scholia* originated, as opposed to lists of stones and other objects of the material world, which go back to the very origin of cuneiform writing. It is worth noting that of these latter lists only chapters XIV (snakes and other animals), XVI (stones), and XVII (plants) of the lexical series *HAR-ra* = *hubullu* have parallels in the three handbooks characterized by their kenning *šikimša*. It is therefore significant that the same three kingdoms of nature have a role not only in Hellenistic magic but also, with slight modifications, in Babylonian astral magic.

The relevant part of Hellenistic magic is described in the work called *Charmides*.¹⁰⁰ Book I "contains twenty-four alphabetically ordered chapters. In each of these are enumerated, both individually and in combination, the magical-medical properties of four entities which share a common letter, these entities being plant, bird, stone, and fish. Each chapter also contains the description of an amulet made of the relevant stone and containing in its design one or more of the other entities."¹⁰¹ Neither birds nor fish—which, by the way, share one tablet, tablet XVIII, of *HAR-ra* = *hubullu*—appear in the Babylonian sources; they are replaced by trees, so that in lieu of four entities, Babylonian sources enumerate three only as being pertinent in magic: plants, stones, and trees. The references to this practice are rare and often unclear, but the juxtaposition of these three is diagnostic, for example: "when you practice plant, stone, and tree and exorcism, do it along with its commentary"¹⁰² or "when you want to ascertain the zodiacal sign

in Edith Porada, Ann F. Farkas et al., eds. (*Manti on Rhine*, Philipp von Zabern, 1988) VI n. 27. A new duplicate published in Egbert von Weibor, *SpTU*, vol. 4 no. 129 iv 19 writes *GU-AM-ŠIM-ŠE-VAI-ŠEŠUŠE-VAI*. The list of amulets *AM-ŠIM-ŠE-VAI* no. 821 also lists 14 GU-AM-ŠIM in reverse line 6.

¹⁰⁰ For recent literature see David Bain, "Treading Birds: An Unnoticed use of *arctia* (*cratides*) 11027-11496," in *JNES* 15 295-304.

¹⁰¹ *Ibid.* 15 296.

¹⁰² *ki U-ŠA, u UŠ u GU MAS-NAŠ-ur-ri a-na GIL-ri-pu-Šu it-ti šu-Šu e-pu-ur* ZA 6 (1891) 243-291, cited A. Livingstone, *Mystical and Mythological Explanatory Works of Assyrian and Babylonian Scholars* (Oxford: Clarendon,

in . . . stone, plant, and tree [. . .]."⁶¹ Trees, plants, and stones were associated with zodiacal signs in late Babylonian texts as they were in Hellenistic Egypt, and to these entities were sometimes added animals, cities, and excerpts or incipits of mantic material, lists of gods and temples, and others.⁶² No explicit reference is made, however, to amulets with such pictorial representations.

In a late commentary⁶³ the mention of plant, stone, and tree is possibly connected with medicine, if my reading⁶⁴ "to heal him [. . .] plant, stone, and tree of which [. . .]" is correct; the next line of the text already makes the association of a zodiacal sign with magic operations⁶⁵ for which the main sources are the two Neo-Babylonian texts BRM 4 20 and 19, and the similar texts LBAI 1597 and LBAI 1626, discussed in Chapter VI. The just cited text which associates the three entities plant, stone, and tree with exorcism or magic (Akkadian *mašmašutu* or *ašiputu* 'art of the exorcist') enjoins the practitioner to have recourse to its *šitu* or, as the signs can also be read, *šetu*. The latter reading, *šetu*, designates a commentary arranged like a glossary in two columns, and such a commentary would have given in the second column the synonym or explanation of the word in the first.⁶⁶ What the commentary to U⁺NA₂ a GŠ may have contained we do not know, possibly it gave equivalences,

[1996] 73 and translated by him as "When you perform plant stone and wood and the art of the exorcist for a sick man, one performs (it) with its comment." For the texts, see Ernst Weidner, *Verstärkt Anstellungen aus Babylonischer Handschriften* (note 520 above) 17ff.

⁶¹ MUL 13, MAS ana lu-ka-ma E 1-15, pre-qa'd' (cf. NA₂ U 1955) [. . .] JCS 6 (1952) 66, 67; JCS 6 12; see Sachs, *ibid.* 71ff.

⁶² See Reiner, *LRAS* 105 (1965) 562f.

⁶³ LBAI 1621.

⁶⁴ [ana] bullušu [. . .] lu-šuyy NA₂ U 475-481 [. . .]

⁶⁵ [8] MUL 13, NTA ana SAM MUL [8] NTA [. . .] line of mark for woman constellation [Pisces]; LBAI 1621 8, restored from BRM 4 20, 6; see Ungnad, *AOF* 14 (1941) 41, 258.

⁶⁶ For botanical glossaries cf. e.g. the glossaries in A. Delatte, *Lexicon atheniense*, Bibliothèque de la Faculté de philosophie et lettres de l'Université de Liège, fasc. 88, vol. 2 pp. 273ff.; the Byzantine Greek *Lexikon kata alphabeton en he Gennemenotai kata tou botanou* (= Delatte, *op. cit.* 378ff.) was also edited subsequently by M. H. Thomson (note 108 above) as no. 9, "Lexique de synonymes grecs" 133ff.

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or common names, to such exotic ingredients as "lion's blood" or "wolf bone" as the magical papyrus *PGM XII 401n.*¹⁷ cited earlier (p. 32) and so represents one tradition in the explanation of "secret" names.

¹⁷ See Hopfner, *Chrestomatheia*, vol. 1 p. 124, §493 and "Magera" in *RL* 27:1192n. 719.

CHAPTER VIII

Nocturnal Rituals

Stellis atque herbas vis est, sed maxima verbus.
*Pliny, *De naturalium Magis* II, p. 465*

Night is a time when spirits roam and danger lurks.⁶⁵ The ominous day was one of the dark, moonless nights of the inter-lunium at the end of the month between last and first visibility of the moon, nights when it was indeed believed that evil spirits could roam freely.⁶⁶ But night is also filled with the emanations of the moon and the stars, and is thereby suited for the performance of rituals and magic manipulations. The moon may have been an ally of sorceresses: it was the full moon that Enchthe, Medea, and other notorious sorceresses "drew down" to make their magic more efficacious, thus making Thessaly, the home of witches, famous from Plato to Lucan⁶⁷—but no Mesopotamian text speaks of the influence of its waxing and waning on the growth of crops or on various human activities. No instructions are extant about procedures known from folklore and that the farmers' handbooks of antiquity—Virgil, Columella, Pliny the Elder—recommend and that are still practiced today under the name "biodynamies":⁶⁸ say, planting to be carried out when the Moon is waxing, and pruning when it is waning.⁶⁹

⁶⁵ A. J. Grafton and N. M. Sowerdow, "Calendar Dates and Ominous Days in Ancient Historiography," *JWCI* 5 (1968) 14–42; the quote is on p. 16.

⁶⁶ For literature see Chapter VI.

⁶⁷ The New York Times, May 2, 1961, Section 8, page 1 (continued on page 7).

⁶⁸ I know only of one instruction to the farmer based on astronomical data, a letter from the Old Babylonian period that warns not to sow the sesame seeds in preparation for sowing before the rising of Sirius. The letter, ILB 47 = *Altbabylonische Briefe* 3 (Leiden: Brill, 1966) no. 65, is quoted by E. R. Kraus, *OVS* 58 (1968) 116 and again, adding a reference to stars signaling the time to cultivate, by R. Frankena, *SIB* 4 p. 197. The reference is

Moon and Sun may combine their influences. Accordingly, two dates expressly designated for administering potions and for other ritual acts are the two regularly occurring planetary events, the conjunction and the opposition of the Sun and the Moon. These are of course, in lay terms, the nights of the new moon, a time when a solar eclipse may occur, and of the full moon, that is, the middle of the month, when a lunar eclipse may occur.

Both dates repeatedly appear in medical texts. The night of the new moon is recommended as the time when an herb against witchcraft is to be ingested in beer,¹² another herb is to be used for purifying the man at new moon's day, by putting it into water and exposing it to the stars,¹³ and still others by placing it around the patient's neck or giving it to him to eat at new moon's day.¹⁴ A particularly precise instruction directs: "put a potsherd lying in the street [and other materials] into first-quality beer, drink (it) at new moon's day facing the sun."¹⁵ Moonless nights are, as we saw, particularly appropriate for gathering herbs. Thus, an instruction, unfortunately

naturally, to the season, and comparable to the importance of the rising of Sothis (see Strabo on signaling the flood of the Nile in Egypt or, in this case, of Sirius observed for the timing of agricultural tasks in the Nabataean Agriculture as noted by H. Christensen, *Die Inschriften und die SeidenstraÙe* (St. Petersburg, 1896), vol. 2, p. 102. The relevance of the old Babylonian letter to the identification of the colchicine plant was most recently adduced by Miguel Ceval, *Plantas medicinales y cosmicas. Aproximación tipológica* (Montalichalsade1 [Barcelona], Spain: Editorial AUSA, 1984) with reference to the discussion by Marvin J. Foxell, *Colchicine* (1981), 15-16.

¹² *ana-am-bubbulu ma-sikar-sa-qa* KAM 76 k. 45r9-11 and 14-21, a three-column pharmacological text of which the rightmost column, the recommendation for use, is preserved but not the first column, the one that gives the name of the herb, and only part of the second column, the one that specifies the herb's curative power.

¹³ *ana-am-bubbulu am-lati-vo-ullulu ana-am-zadu-ina* U.1-bu-[ut-lu'] ibid. 10.

¹⁴ *ana-11-va-va ma-kisadim* [] KAM 76 k. 45r9-11, *ana-la-sikulu*, ibid. 12-13 and *ko-be-er* *ana-am-kim-e* 1 rev. + 18-19-24-27-29-30-32. The two texts are discussed in Pablo Herrero, *La Therapeutique mesopotamienne*, M. Sigrist, ed. (Paris: Recherche sciences civilisations, 1984), 19, with a note that we have here "une des rares prescriptions de caractère magique," ibid., n. 37.

¹⁵ *ba-sab-ta-sa ma-sa-up-ra-da-ti* [] *ana-libbi-sikam re-ti* *ana-dû* *ma-bubbulu ana-pan* [Samarkand] KAM 288.7, restored from KAM 85.1 n. 12.

fragmentary; prescribes a procedure "on the day when the moon disappears from the sky"¹⁰ and continues with "you pull up [. . .] the stars must not see (it)"; on the 29th day [. . .] hair from his head" and further directs that an etgy be made (presumably of the evil) and offered to the sun, Sāmaś.¹¹

An *etjig* is also used in a ritual to be performed at the first sighting of the new moon, a favorable moment as the subscript tells us: "Incantation to recite in order to turn the evil into good at the first visibility of the moon."²⁸

The effigy to be fashioned, at moonrise, is called here not with the usual term 'figure' or 'statuette' but *passu* 'doll',¹⁶ specified in two exemplars as a "male doll" and in the third as a "female doll."¹⁷ Whose effigy the "doll" represents is not stated in the preserved portions. The ritual addresses the exorcist with the words "throw the 'doll' behind you into the river, and the evil will be loosed."¹⁸ Whereas one

[illegible]

Pl. 141. *Colletes* sp. n.

KÄNIMASKA RITUALS—*Sumerlu* 1876 v. 3, K. 951. This agrostophan has survived in three exemplars, one which has the ritual on the reverse (BMS 21 + 23 + K. 103), now open in box 2; two subscribers no. 4–15, edited by Berner Mayer (*Hesperianagor*, no. 6) compared to *Chalchultun*, *Telchaltun*, *Chucumagor*. Studied by series Major 5 (Rome). Biblical Institute Press, 1976) 520r has on the obverse a prayer to the Moon god Sin, with hitting of the hand; its meter resembles that of the prayers for calming the angry god *turgil-lubila-gur-e-fa*. The second folio (K. 25) is a large tablet with three columns of text beside it enumerates a number of afflictions—seemingly psychological; the ritual appears toward the end—and is followed by the words ‘the evil of dreams and other evil signs,’ a phrase that may represent the ritual rubric. The purpose of the third ritual (K. 25v) and the prayer to the Moon preceding it is, according to its rubric, ‘to calm the angry god.’ The prayer to the Moon was edited, along with its several more complete duplicates, by W. G. Lambert (JCS 33 [1974] 284ff).

$$n \geq 1, N_n(\cdot) = (s_n(\cdot))_{1 \leq i \leq n}.$$

⁹⁸ See Dennis Landberger, *W/KA 50*, 1904b: 117ff.

^{6,12} Z.A. N.A. NITIA 18.4 31.6 27.1 25.1

(note 228, above) 534]

[illegible]

by a "persecuting ghost" ("it is performed 'on the 15th day, when moon and sun are equally present.'"⁴⁴) The exorcist "clothes the patient in a dirty garment, draws his blood by slashing his forehead with an obsidian (knife), has him sit down in a reed hut, has him face north, makes an incense offering of juniper and libates cow's milk to Sun toward 'sunset' and makes an incense offering of 'cypress' and libates five beer to Šamaš toward 'sunrise.' Then the patient recites as follows: 'To my left is Sin, the crescent of the great heavens,'⁴⁵ 'to my right the father of mankind,'⁴⁶ 'Šamaš the judge, the two gods, ancestors (lit. fathers) of the great gods, who determine the lots for the far-flung people. An evil wind has blown at me, the persecuting ghost persecutes me, so that I am worried, I am troubled, disturbed (as I face) your verdict. Save me so that I not come to grief.' He recites this seven times, leaves the reed hut, changes his clothes, puts on a pure garment, speaks to Sin as follows: 'Incantation: Sin, light of heaven and earth, take away my sickness.' He speaks this three times and speaks to Šamaš as follows: 'Šamaš, great judge, father of mankind'⁴⁷ 'let the evil wind that has settled on me rise to heaven like smoke, and I will sing your praises' he speaks this three times and does not | . . . |"⁴⁸

^a α -pinene oxidant: 0.4 M; 2.78 mmol; 2.78 mmol; 0.4 M; 2.78 mmol; 2.78 mmol.[illegible]

¹¹ The word *insecurus* is found here as a standard epithet of the *numen* since obviously on the 15th the enemy were all

56 The word for 'markand' is *su-pa-ru* (s-w-fo-*u*, literally 'black headed') written with the Sumero-Akkadian word *lu-ka* 'a young fox'.

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[illegible]

Marduk), and his consort Bēlīya in lines 318ff. addresses the goddess (lines 323-32) as the planet Venus or as one of its manifestations as a fixed star: the Bow (MUL BANI), the Goat (MUL EZ), the Star of Abundance (MUL HE GAL A), the Star of Dignity (MUL.BAL.TEŠ A), the Wagon (MUL MARGID DA), Coma Berenices' (MUL A EDIN) and Vela (MUL NIN.MAH).¹⁶¹

In the temple of Anu at Uruk in a nocturnal ceremony¹⁶² offerings are made on the 16th (of a month that is not identified in the preserved portions of the ritual) to the heavenly manifestations of the temple's main deities: to "Anu of the sky" and "Antu of the sky," as well as to the seven planets,¹⁶³ and in the same text daily offerings are made to "Anu and Antu of the sky" and to the seven planets, now named in the sequence Jupiter, Venus, Mercury, Saturn, Mars, the rising of the Sun and the sighting of the Moon.¹⁶⁴

The heavenly manifestations of Anu and Antu are, for Anu, a star belonging to the constellation Mudrukešda (or Draconis) and, for Antu, a star in the constellation Ursa Major.¹⁶⁵ The text itself specifies, "as soon as the star of Great Anu of the sky rises, (and?) Great Antu of the sky rises in the Wagon."¹⁶⁶

The most elaborate ritual performed at night with appeal to the stars is the "washing of the mouth" (*mas-pi*). It deals with the all-important ceremony of breathing life into the statues of the gods, a process called *empsychosis* in Greek. In Babylonia,

¹⁶¹ Akkadian: *Isyatu*.

¹⁶² *Rituals occasions* (note 64^u above) 79 lines 32-34 UDU.KAM Ga arbušsa lu immeš-še-ru q-tu maršu ebūti ša qanna u-supru šaklulu ana 'ANUD[SE] u Anu ša šamē u 'U[LU] NIN.MAH 7 šuana ana ša al-pi-na re-bi-šamū ša ... na paramāhi ziqurrat 'Ani kima ša UDU.KAM ša Tebēti impegguš.

¹⁶³ *imšam kal šam lu immeš maru ebūti ša qanna u-supru šaklulu ana Anu u Antu ša šamē-še-ru ME.CAK UD.BAL 'UL LU UDU.KAM 'Šal-bat a-mi KI.Ri-ša šamaš u KI.TI 'A 'Šin ...* *empsychosis* (ibid. p. 29 rev. 29-31) and the similar enumeration ... *ana muhū?* paššurnah hurasana ša ME.CAK UD.BAL 'UL LU UDU.KAM 'Šal-bat a-mi 'Šin šamaš kima ša immaš-pa-re-gate-ta-āš; ma-re-t (ibid. p. 11^u 22-24).

¹⁶⁴ *Rituals occasions* (note 64^u above) 85 a 2. The star list to which he refers is now published in *Ural* 1775.

¹⁶⁵ *kima ša MUL 'Anu rabū ša šame ātapha An-tum rabtu ša šame ina MUL MARGID-DA ātapha* "Une cérémonie nocturne dans le temple d'Anu" in *Rituals occasions* (note 64^u above) 12^u lines 35-36.

the ceremony is called the "opening of the mouth" (*piš pi*), which is preceded by the "washing of the mouth" (*miš pi*) of the divine statue. Divine statues, we know, were made of wood, and overlaid with precious materials, usually gold; incrustations of precious stones adorned them.⁷⁷ Their fabrication was, therefore, placed under the tutelage of the patron gods of carpenters, goldsmiths, and jewelers. Only after the inert materials were infused with breath through the mouth-opening ceremony could the statue eat and drink the offerings, and smell the incense.⁷⁸

The vivification of the divine statue comprised several stages. The first stage, the first mouth-washing, was conducted in the workshop; then, the statue was carried in procession to the river bank, where a second mouth-washing took place. The statue was first facing west, then facing east. Offerings were made to the nine great gods, among whom are the major planetary gods, that is, Sun, Moon, and Venus; then to the nine patron gods of the craftsmen; then to other planets and to certain fixed stars and constellations, among them Sirius, Libra, the Wagon, the Goat, and the Scorpion, and finally to the stars rising over the three "paths" along the eastern horizon, that is, *all the stars*.⁷⁹ The role of the astral deities in the ritual is not specified, nevertheless, that role is clear from the description of the venue, which is the river bank, and the time: at night, as indicated by the fact that the procession advances by torchlight, the stars and planets were to irradiate the statue crafted of wood and adorned with precious metals and stones and thus infuse these materials with their power. The offerings are

⁷⁷ Oppenheim, *The Sumerian Craftsmen of the Gods* (JNES 4 (1949) 172-93).

⁷⁸ *salma ana ana piš pi pi qutima ul es-in akala ul ukkal me ul šatti* this image, without opening of the mouth, does not smell incense, does not eat food, does not drink water, S. 17.200.42r and dupl. PBS 12.1.6, a near-literal translation of Psalm 135, description of idols.

⁷⁹ S. Smith, 17.45.1925.77r (also English Edition, *Isa and Eden nach den Vorklassischen Texten*, ed. B. Meissner, Berlin and Leipzig, de Gruyter & Co., 1931) pp. 105-25. Reprinted in W. Mayer, *Die NS 47* (1976) 445 W 20080.3.5 (copy). Fragmentation: Babilonia 2. no. 10. The introductory instructions are partially broken, the text begins: *concerns šepu* (JNES 28, 1973-74, 103-4 col. 1) *šepu* "where the work and the god" [] in a favorable month. Lines 1r

described with the words: "you set up a cultic arrangement"⁶² to the god"; it seems that these "cultic arrangements" or, as we might say, "altars," are the loci to which the astral god will descend. It is to be noted that no specific connection is made between the various materials of which the statue is made and the deity that presides over each. Only in Hellenistic times will each planet be associated with a particular metal and stone.⁶³

At the head of the offerings to astral deities stands Jupiter:

You set up two altars for Jupiter and Venus - ditto (= you perform the mouth-washing)

You set up two altars for the Moon and Saturn - ditto

You set up three altars for Mercury, Sirius, and Mars - ditto

You set up six altars for Libra, (called) the Star⁶⁴ at Šamaš, the Flow, etc. etc.

the Wagon, the Cluster, the Goat - ditto

You set up four altars for the Field (the Square of Pegasus), the Swallow, the Star of Anunitu, the Furrow - ditto

You set up four altars for the Fish, Aquarius, the Star of Enkidu, the Scorpion - ditto

You set up three altars for (the stars) of the Path of Anu, of the Path of Enlil, of the Path of Ea - ditto⁶⁵

The first seven offerings, in two groups of two and one of three, are meant for the seven planets, even though the place of the sun, Šamaš, is taken by Sirius in the last group, either because he was included in the group of nine gods enumerated

⁶² rksu

⁶³ Bourhe-Deledup, *Astrologie grecque* (Paris, 1899, reprinted Aalen, Scientia, 1979) 117

⁶⁴ Text: House

⁶⁵ 29. 2 rksu a-na ŠAM. ME.ŠAR.ū. (Dil-bat tarakkas KI MIN

30. 2 rksu a-na ŠAM.ū. (LIL. ME.ŠAR.ū.Š tarakkas KI MIN

31. 3 rksu a-na ME.ŠAR.ū. (LIL. ME.ŠAR.ū.Š tarakkas KI MIN

32. 4 rksu a-na ME.ŠAR.ū. (LIL. ME.ŠAR.ū.Š tarakkas KI MIN

33. ME.ŠAR.ū. (LIL. ME.ŠAR.ū.Š tarakkas KI MIN

34. 4 rksu a-na ME.ŠAR.ū. (LIL. ME.ŠAR.ū.Š tarakkas KI MIN

35. 4 rksu a-na ME.ŠAR.ū. (LIL. ME.ŠAR.ū.Š tarakkas KI MIN

36. 3 rksu a-na ŠAM.ū. (LIL. ME.ŠAR.ū.Š tarakkas KI MIN

earlier in line 25 or simply because it is right. The next three groups include the zodiacal constellations Libra (with its standard epithet, Star of Samas) in the first group of six, Virgo in the second group of four, and Pisces, Aquarius, and Scorpius in the third group, also of four. Moreover, the northern constellations Triangulum (the Plow), Bootes (ŠL.PA), Ursa Major (the Wagon), Coma Berenices (the Cluster), and Lyra (the Goat) receive offerings in the first group, the Square of Pegasus and the Northern Fish (the Swallow) – paired, as usual, with the Southern Fish (the Star of Anunitu) – in the second group, and the southern constellation Vela (the Star of Eridu) in the third. And finally, offerings are made to all the stars, collectively called “those of (the paths of) Anu, Enlil, and [Ea].”

While only the Late Babylonian version of the mouth-washing ritual describes in such detail the appeal to the stellar powers, already the Assyrian kings Esarhaddon and Assurbanipal speak of the initiation of the new cult statues as taking place before not only the gods and the divine patrons of the crafts by means of which these statues were made, but also “before the stars of the sky,” as the texts expressly state.⁷⁶ In the Assurbanipal-library version of the directions for the mouth-washing ritual only the setting up of an offering table⁷⁷ for “ŠAR ME GĀR (Jupiter) and an altar for ME ŠU PA (- Arcturus) and the incipits of the prayers to be addressed to them are cited: “You Šulpaia”⁷⁸ to Jupiter, and “(You,) magnificent one, Mountain of the Iggi-gods”⁷⁹ to Arcturus.⁸⁰ It was noted long ago that the Assyrian recension “did not enumerate these [astral] deities” at any rate in quite the same con-

⁷⁶ *maḫar kakkabs* Samamu M. Streck, *Assurbanipal, Vorderasiatische Bibliothek* 72 (Leipzig: Hinrichs, 1929) 268 m 206; Th. Baer, *Das Buch der Assurbanipal*, vol. 2 (Leipzig, 1933) 845; Baer, *Isis* 9 (1901) 13, and *paralipomena* 1, 21, etc.

⁷⁷ *uṣṣu* – *patru*, line 34.

⁷⁸ *atta* (Šulpaia) line 18.

⁷⁹ *qurba sulu* (Iggi) line 21.

⁸⁰ Gerhard Meier, “Die Rituale der Serie ‘Mundwaschung,’” *Akt* 12 (1957) 75 n. 45. The rituals and prayers to the stars appear on K 4924 + obv. 14–21. A new edition of the “mouth-washing” ritual is being prepared by G. B. F. Walker.

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nexion,"¹⁰¹ it is therefore only in the Babylonian, late version that the process takes on the character of what may already be called "astral religion" while the Assyrian recension testifies only to the belief in stellar irradiation, the effect of which has permeated, as we saw, several crucial areas of Babylonian science and religion.

¹⁰¹ S. Smith *JRAS* 1925-40



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